

The Technology Review

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ROBERT E. ROGERS, *Editor*, Mass. Inst. Tech., Cambridge, Mass.

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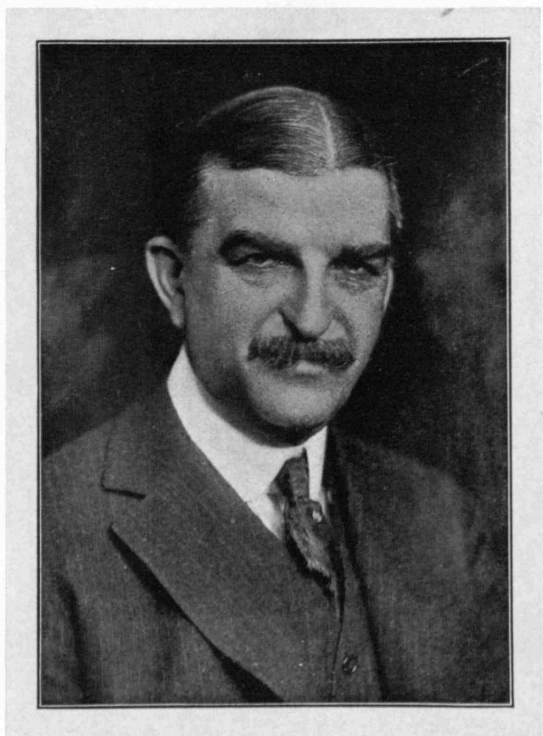
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technology review

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ISAAC WHITE LITCHFIELD, '85

WHEREAS, The work of indexing and classifying for mobilization the technical and specially trained men of the country requires the constant presence in Washington of Mr. I. W. Litchfield, '85, and

WHEREAS, The demands of this work have obliged him to tender his resignation as Editor of the TECHNOLOGY REVIEW, as Field Manager of the Alumni Association and as Representative of the Class of '85, to the Alumni Council, be it

Resolved, That the Alumni Council of the Massachusetts Institute of Technology, recognizing the superior importance in the national interest of the work upon which he is now engaged, releases Mr. Litchfield in full confidence that the record he is making in the national service will be of great value to the country, a credit to himself and a source of pride to the Institute;

That in granting this release and accepting Mr. Litchfield's resignation as Editor of the TECHNOLOGY REVIEW, as Field Manager of the Alumni Association and as Representative of the Class of '85, the Alumni Council extends to Mr. I. W. Litchfield the thanks of the Alumni Association of the Massachusetts Institute of Technology for the many years of devoted and effective service which he has rendered in each of these several capacities;

That during a period of extraordinary development of the Institute Mr. Litchfield, as Editor of the TECHNOLOGY REVIEW, has held that publication abreast of this development as a register and reflection of its many-phased activities, and has thereby firmly established the REVIEW, extended its influence, enhanced its permanent value as a record and sustained and developed its interest to the Alumni and all friends of the Institute;

That as Representative of the Class of '85 to the Alumni Council Mr. Litchfield has been conspicuous for constructive comment and suggestion and has consistently and always worked for the best interests of the Institute;

That as Field Manager of the Alumni Association Mr. Litchfield brought to the position and employed without stint an enthusiasm so fine and contagious, so wide and intimate a knowledge of Institute affairs and men, ideas so ingenious and compelling and such loyalty and devotion to his Alma Mater that he has come to stand in the minds of many as the embodiment of the Institute spirit and in the minds of all as an earnest, resourceful and effective agent for developing alumni interest, organizing alumni activities and for carrying far and wide the message of the Institute.

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A NEW EDITOR AND A NEW POLICY FOR THE REVIEW

To Every Alumnus Who Subscribes to The Review, Attention

THE TECHNOLOGY REVIEW will hereafter be a quarterly, published at the usual dates for the large numbers. The small monthly numbers, which have proved useless for immediate news value and unimportant for purposes of record, will be discontinued. Their place will be taken by the *War-Time Tech*, the newspaper issued twice a week at the Institute to print war-time Technology news for both undergraduates and alumni.

Hereafter *The Tech* will give the news fresh, week by week, and the REVIEW will offer the permanent résumé and record. The REVIEW cannot, then, in the nature of things, try to reprint as fully as it did in July and this number the material from *The Tech* which it thought would be of interest to its readers. The three-month period between issues, the strain on the quarterly numbers for space will forbid.

The REVIEW reaches over 5,000 alumni, the *War-Time Tech* about 2,000. This means, naturally, that some 3,000 alumni are going to miss the fresh news, the detailed news, the long interesting letters from the front, and especially the personal notes about Technology men in service which are sent out by the Washington Office. They will get all this summarized to a certain extent in the REVIEW, but they will, perforce, miss a great deal.

What are these 3,000, then, to do?

The answer is obvious. By the time they read this page they will have received their bill for dues from the Alumni Association, informing them that they are urged and expected to subscribe for a year to the *War-Time Tech* and thereby to keep in almost daily

touch with the things the alumni and undergraduates are doing in industry and at the front.

The REVIEW backs up the *War-Time Tech* with all its strength. It urges its 3,000 readers who as yet do not read the *War-Time Tech* to remedy their omission. For its part the REVIEW will continue, four times a year, to furnish the alumni with a complete, careful, documented record and digest of the important things in the life of the Institute and its alumni, with just as full class notes as the class secretaries can be induced to send in, with as many and as interesting special articles and pictures of interest to Technology men as can be secured.

Nobody can take Ike Litchfield's place! He built the REVIEW up into a great organ of the alumni. But he has greater work to do. His successor, appointed by the Council, took charge last summer and got out the July issue, belated, but, we believe, full of information of permanent value to Tech men. If you don't like the new editor's magazine write in and say so. If you do, all the more. Send in everything you can to help him make the magazine a live wire.

And keep yourself awake and in touch with the extraordinary things old M. I. T. and her sons are doing in this war by supplementing the REVIEW with the *War-Time Tech*. You won't regret it.

ROBERT E. ROGERS,
Editor.

WHAT THE WAR DID TO OUR REGISTRATION

All but ten per cent. of the Institute's usual enrollment enters this fall

Already we can begin to see from the registration at the Institute some of the effects of the war on technical education. A knowledge of this is important since it may help shape lines of preliminary study towards those professions which the war shows to be in demand. The showing is that chemical engineering is stimulated and naval engineering exhibits an equal or greater increase in students, while civil engineering and electrical engineering remain in about the normal condition. The total is 1,670.

The Institute's freshman class is larger than ever, 504 against 450 of last year, with still a considerable number who took the entrance examinations in June and have not yet registered. The sophomore class as now registered actually shows a gain of five or six per cent., being 443 against 420 who were in the class of freshmen last June. The junior class assembles with 358 registered against 456 sophomores in June and the senior class now calls together 325 out of 484 juniors before the vacation. It is in the post-graduate work that the largest percentage of loss comes. These men are of the age and attainments to be instantly of service to their country, so that here the number has fallen from 65 last year to 39 at the moment.

The graduate students stand today at 60 per cent. of last year's figure. There has been the most shrinkage in the junior class, the sophomores of last year, to whom two years more of schooling has perhaps seemed a long time in the face of striking events calling for evidence of patriotism. But the return of 86 per cent. of the juniors to be seniors is evidence that the junior summer camp was well advised. The purpose of this was to gain some military practice and to give to students an opportunity to anticipate fourth year studies, and be finished with their studies and ready for active service at an earlier date.

In a consideration of the effect on the courses it may be well to omit those with less than fifty men since the defection of two or three students shows an undue percentage of shrinkage. One of them, however, naval architecture, is stimulated by the war to

an increase of 16 per cent. The course has always been small and has been maintained by the Institute for a good many years to round out the complete school. These times more than justify that policy of the past.

Of the larger courses, civil engineering maintains practically the same figure as in former years, the shrinkage being 1.2 per cent., while electrical engineering opens the year with a loss of only 2 per cent. Chemical engineering, thanks probably to the advertisement given to it by the war has a 12 per cent. increase. It is interesting to see that engineering administration is practically holding its own, having lost only $6\frac{1}{2}$ per cent. since the last registration. This has always been a popular course, at first, it is hinted, from the fact that the students thought that it might be an easy way to finish at Tech, but latterly from the excellent records that its men have been able to make.

Architecture, being perhaps a luxury among studies, has declined nearly one-third in the number of its students. Unfortunately military architecture is closely allied to civil engineering, and here the war has had an effect. Perhaps the undue cost of building materials, fifty to one hundred per cent. in many cases, and the consequent gossip that building operations will be at a standstill, has had its influence in deterring young men from taking it up with usual vigor.

It is a little surprising, however, to find that mechanical engineering has lost about 21 per cent. This is a study that should be stimulated by the war, for it is in this work that Professor Miller, head of the department, has undertaken for the U. S. Shipping Board the management of the schools for marine engine room officers, places in principal ports in the Country. The decline in this department is the more surprising in that among the hundred odd men who have entered the Institute from other colleges, men who have probaby looked over the field in engineering needs, it stands second only to chemical engineering in the number of men who chose it. These selections bear out in general, however, the tendencies shown by the full registration, for the favorite options among these men were, in the order named: chemical engineering, mechanical engineering, civil engineering, electrical engineering and engineering administration, with naval architecture next in order. The actual registration presents them in the order: naval architecture, chemical engineering, civil engineering, electrical

engineering, and engineering administration. This shows a focusing of popular attention on some of the needed war studies.

Massachusetts furnishes some 300 of the freshmen, 69 from Boston, of which Dorchester furnishes one-third, 24 from Cambridge, 17 from Newton, 13 from Lawrence, 11 from Brookline and 10 from Brockton. The distribution is shown by the fact that 66 smaller places furnish 100 students. In the manufacturing centres the number has fallen.

There are 42 freshmen from New England in this registration, 57 from the Middle States and 14 south of Philadelphia. Norway sends two and Spain one; Mexico sends eight, Chile adds two to the seven men here, and Cuba adds one, while China has four freshmen and Japan two. Thirteen women in all have registered.

A representative of a neighboring institution is said to have declared that any place of higher education opening with more than 50 per cent of its former enrollment is unpatriotic. Perhaps—or perhaps the grapes are green.

Alumni Gift to Mr. Litchfield

There was recently presented to "Ike" Litchfield, '85, upon his relinquishing of his work for the Alumni Association and in belated recognition of his tremendous and successful work during the great reunion of last year, a purse of \$3,500, as a token of appreciation and esteem for his work through many years in building up the association till it is conceded to be one of the largest and strongest active graduate organizations in the country.

The money was collected among the alumni by a committee of thirty-five men, with C. A. Stone, '88, as chairman, and E. C. Lufkin, '85, and L. E. Gardner, '98, as treasurer and secretary respectively. The purse, we understand, was originally planned to be much larger, but the national difficulties of the past summer made it seem advisable not to wait any longer in collection but to present the amount already raised, with the assurance that it carried with it as much affection and esteem as if it had been much larger.

THE OCTOBER COUNCIL MEETING

The first meeting of the Council in its own room at the Walker Memorial

An unusually large meeting began the work of the Alumni Council for the year, at its dinner in the Walker Memorial, on the evening of October 29. The work of the summer was reported upon and plans laid for increasing activity during the coming year.

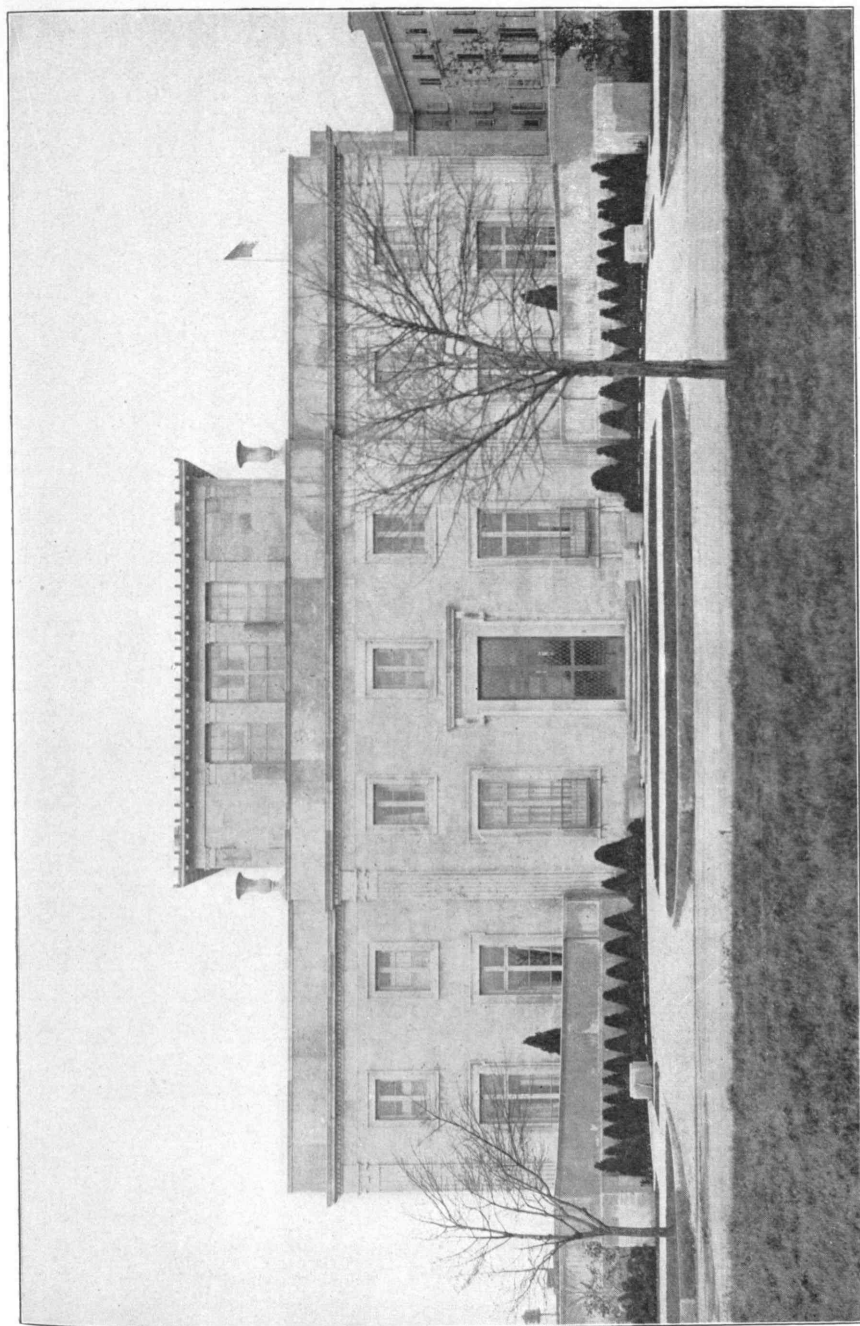
The secretary made report for the Executive Committee during the past summer, especially of resignations and appointments. The resignation of I. W. Litchfield, '85, as editor of the *REVIEW*, field manager and representative of his class on the Council and of all alumni committees except the Committee for National Service, was presented. Mr. Litchfield had written to be released from his service on account of his war service in Washington.

It was voted that resolutions in appreciation of Mr. Litchfield's long service be prepared by A. D. Little, '85, that they be placed on the records of the Council and printed in the *REVIEW*. It was further voted, unanimously, upon the recommendation of Mr. Emerson, that Mr. Litchfield be made an honorary member of the Council, an unprecedented honor designed to show further the Council's feeling about Mr. Litchfield's work.

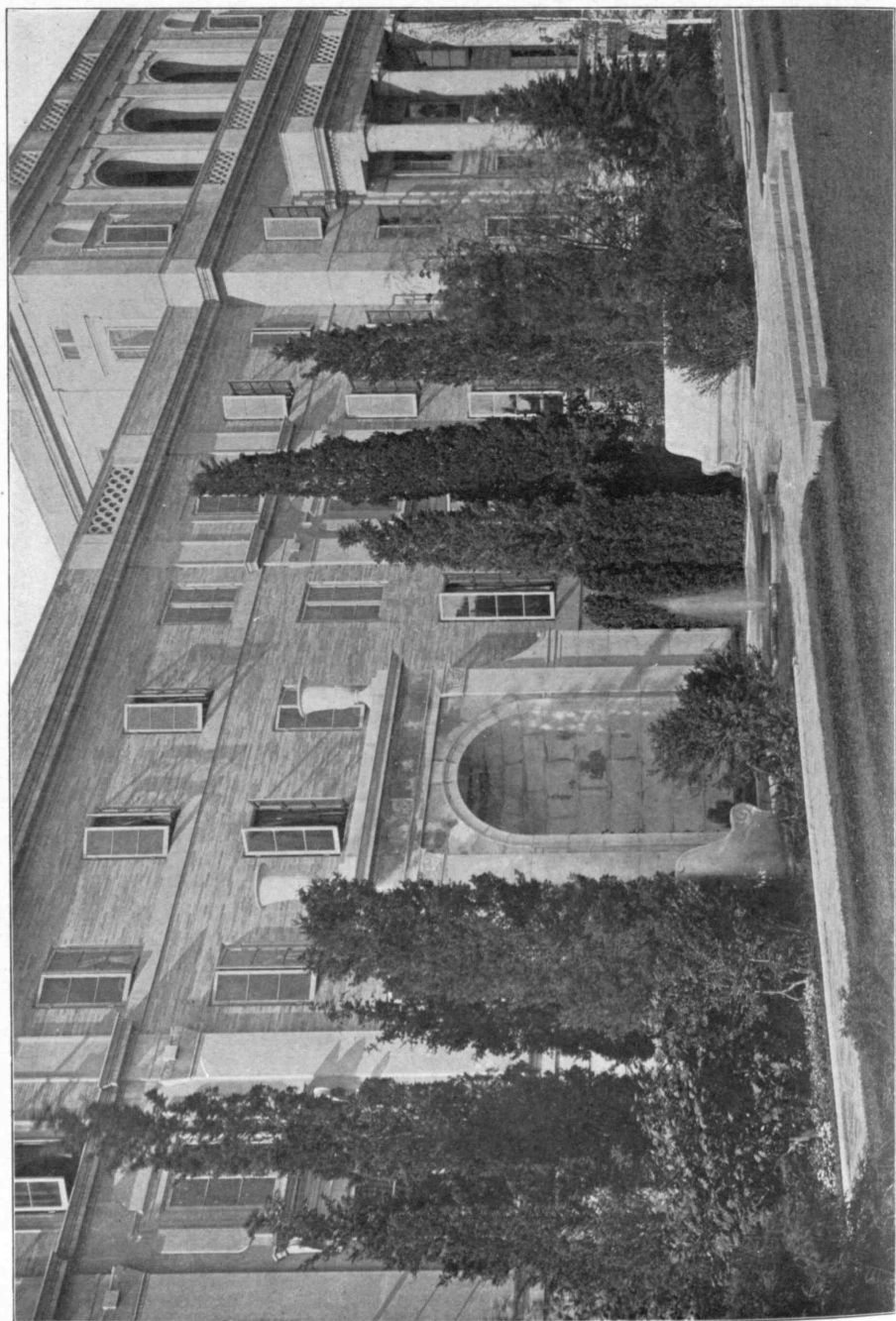
The president presented the written resignation of James P. Munroe, '82, as chairman of the M. I. T. Committee for National Service and chairman of the Committee of the Walker Memorial Sunday Pow-wows. Mr. Munroe's resignation was accepted with regret. In his place as chairman of the Committee on National Service the president appointed James W. Rollins, '78.

The president read a letter from Professor Stokes of Yale, chairman of the Executive Board of the American University Union, in regard to the admirable service Van Rensselaer Lansingh, '98, has given the University Union in Paris and of their desire to have him made its business manager and assistant director.

The president made an announcement of a gift of \$3,000 to the War Fund from Mrs. Edward Cunningham, in memory of Edward Cunningham, a late member of the class of '91. The gift is to be credited to the class.



THE FAÇADE OF PRESIDENT MACLAURIN'S NEW HOUSE



THE SCREEN BETWEEN THE PRESIDENT'S HOUSE AND THE DORMITORY

F. H. Fay, '93, made a report of progress for the M. I. T. Committee for National Service.

President Hart then called upon President Maclaurin of the Institute who spoke on the part taken by Technology in War Activities, especially of the part played by members of the Faculty, about which too little had been said. He then told of the constantly increasing numbers of the two schools of aviation detailed at the Institute. He called the attention of the Council to the fact that in the student body there seems to exist some apathy towards the war work, particularly regarding the occupation of the Walker Memorial by the Naval Aviation School, and he suggested that members of the Council could quietly influence the undergraduates to their advantage to respect and realize the necessity for making such sacrifices for the national service. President Maclaurin also mentioned the recent bequest from Mrs. Evans of \$200,000 and stated that this was not the first time Mrs. Evans had given largely, but that, heretofore, she had preferred to remain one of the mysterious donors.

Professor Pearson reported on his visit to fourteen local associations and spoke of the pressing need for an alumni field secretary.

P. C. Leonard, '17, who has been appointed one of the alumni representatives on *The Tech*, spoke of his summer work in making *The Tech* an alumni as well as an undergraduate newspaper to replace the bulletins previously issued by the Washington Bureau. In recognition and appreciation of Mr. Leonard's service and that of his associates, for the work which they have contributed faithfully and without remuneration all summer, a vote of thanks was passed.

F. H. Fay, '93, chairman of the Committee on the Publication of the TECHNOLOGY REVIEW, advised the Council of the opinion his committee had arrived at, in consultation with the Advisory Committee on Undergraduate Publications, that the REVIEW be henceforth published but four times a year, that is, to omit the small numbers and to retain only the quarterly numbers. It was voted that, beginning January, 1918, the TECHNOLOGY REVIEW be limited to four quarterly numbers and that a committee of three be appointed by the chair to work out such an arrangement. President Hart appointed F. H. Fay, chairman, W. B. Snow, '82, and Donald G. Robbins, '07.

The president called upon the bursar of the Institute, Horace S.

Ford, to tell about the completion of the Walker Memorial and of its present use by the Naval Aviators. Mr. Ford congratulated the Council on meeting for the first time in its own room in the Walker Memorial and gave an account of how quickly the Memorial had been completed for the accommodation of the Naval Aviation School which is barracked in the gymnasium, and something of the problem of feeding and lodging so many men, and why it was that the students were not using the Memorial.

Mr. Dennison reported to the Council that his class had had the first class meeting ever held in the Walker Memorial and suggested that secretaries of other classes hold their regular class dinners there.

The Council adjourned at 9.30 p. m.

Professor Pearson Swings Around the Circle

In the absence of a regular field manager this summer, the M. I. T. Committee on National Service appointed Professor H. G. Pearson of the English department of the Institute to visit as many of the local alumni associations as he was able, to find out what Technology men were doing and, especially, to inform them of what was being done by the Institute and its graduates, in Cambridge, in Washington and abroad. Professor Pearson started for Washington early in August and after digesting the large amount of material furnished him by the Washington Bureau on Technology men in war service, he went from club to club, adding to his material as he went, till finally he was giving a two-hour talk covering every activity in which Technology men had found representation. He was received, he says, everywhere with keen interest and cordiality and came home convinced of the great good a permanent field secretary could do, especially at this time. He urges that one be appointed at once to keep the local clubs informed and on the job.

His itinerary was: Dayton, August 4; Cincinnati, August 6; Indianapolis, August 8; St. Louis, August 10; Chicago, August 13; Detroit, August 15; Cleveland, August 17; Akron, August 18; Buffalo, August 21; Rochester, August 23; Schenectady, August 24; Philadelphia, October 3; and New York, October 19.

THE COMMITTEE ON NATIONAL SERVICE

The September meeting formulates plans for the winter

Important plans for future work were made at the meeting of the Executive Committee of the M. I. T. Committee for National Service in Washington on September. In addition to the regular members of the Committee—Jas. P. Munroe, '82, chairman; F. H. Smyth, '13, treasurer; C. W. Eaton, '85, and Morris Knowles, '91,—there were present F. R. Hart, '89, W. Humphreys, '97, and H. E. Kebbon, '12, representing the Executive Committee of the Alumni Association, F. H. Fay, '93, representing the Association of Class Secretaries, A. F. Bemis, '93, and H. W. Tyler, '84, for the Finance Committee for the auxiliary war work, and J. M. DeBell, '17, who is in charge of the Washington office. Mrs. Edward Cunningham and Mrs. A. J. George attended one of the sessions of the committee, and Professor Henry G. Pearson was present to make a report on his recent trip to Technology centers in the Middle West.

As a result of the discussion held during the day the following decisions were reached:

"1. In view of its constant usefulness, the Washington office is to be continued, under conditions involving less expense to the M. I. T. Committee for National Service. If possible, a man will be found to take permanent charge of it.

"2. A complete record is to be kept of all Technology men and women performing any kind of service in connection with the war. This will be done by the Alumni office in Cambridge, working in conjunction with the Registrar's office, the Association of the Class Secretaries, the Washington office and the local clubs. Moreover, a general appeal for information is to be sent out to all Alumni and former students. All who receive this appeal are urged to reply without delay. Unless these records are complete, the work to be done for Technology men in France will be only partly effective.

"3. *The War-Time Tech* will continue on its present basis. The value of its news service to the alumni is constantly increasing. Those who have not yet subscribed should do so at once.

"4. The Technology Workroom, about to be opened in the Rogers Building, deserves the support of all interested in supplying the numerous articles that contribute to the comfort of the soldier in camp and hospital. Moreover, the workroom, through its affiliation with the Red Cross, has the privilege of forwarding to Technology men in France packages sent to them individually. This opportunity to reach individuals is not afforded by the regular channels. On account of this privilege, the workroom is sure to make a special appeal to Technology women. The committee in charge of this branch of work is the War Service Auxiliary, with Mrs. Cunningham as chairman. This committee is also responsible for all the different forms of women's work.

"5. The immediate response to the service offered by the Technology Club of Paris has amply justified the committee in sending Mr. Lansingh over as promptly as it did. Although the club will presently take its place as a part of the American University Union, of which the Institute of Technology is a member, its work will more and more engage the interest of Technology men and women. They are urged to give it all the aid in their power.

"6. Plans for raising money for the various enterprises for which the M. I. T. Committee for National Service stands sponsor will presently be announced. In the meantime, the committee is glad to be able to state that none of the money so raised will be employed to defray any expense that is in the nature of an overhead charge. Every dollar donated, the giver may rest assured, will be used to the last cent to meet the needs of the men in service here and abroad. How great these needs will be we are only just beginning to realize. The response of Technology men to this need is bound to be generous as it has been to every other call."

National Defence Council Appoints Morss

Everett Morss, '85, at present a member of the Executive Committee of the Institute, has recently been appointed a member of the priority committee of the Council of National Defence. The priority committee consists of seven members of the Council of National Defence and will decide what tasks are to be first accomplished by the council. Mr. Morss has left Boston to take up his new duties in Washington.

TECHNOLOGY MEN IN WAR SERVICE

Incomplete records show at least five hundred as the
school year begins

The questions of securing complete records of the Institute men in military service or in the allied war services, such a list as the University of California, for instance, has already published, has been given prompt attention by the Institute authorities and the Alumni Association. By the time this issue is printed every alumnus will have received statistical material which he is urged to fill out and return at once. The response in the case of the statistics secured by the Mobilization Committee in the spring was splendid, but this one must be better. It must be absolutely complete.

All summer the *War-time Tech* has been publishing scattered notes about graduates in service, as they come into the Washington office. Recently these are being published from week to week, listed by classes. The REVIEW, also, in this number's class notes, prints whatever personal information the class secretaries have been able to secure. Both of these lists are incomplete and unclassified. One repeats the other, often, and the activities of many men are necessarily left out altogether. But for the moment this is the best we can do.

As soon as the official alumni list is completed—and to this end every man, even if he is doing nothing—must send in his material promptly, the official list will be published, probably both in the REVIEW and as a separate pamphlet. To this list additions can be made in a regular and orderly fashion. But we must have the list first.

In this number, therefore, all that the REVIEW can do is to print an attempt at a digest of such information as the Alumni Association has, as it stood early in October.

A tally of the Institute's graduates and undergraduates shows that more than five hundred of them are already in the service of the country as this is related to the war. Of the three classes '18, '19 and '20, more than two hundred are in this list, a number that corresponds fairly closely to the falling off in the registration of students this year. Pretty nearly one hundred per cent. of the undergraduates are thus accounted for.

There are some interesting figures in the counting of classes. Beginning with 1890 practically every class has some members in service of one kind or another, but up to 1905 this number according to the returns is only two or three to a class, while from 1906 till 1909 the registry is six or seven. Every day sees notable additions to the roll and these come largely from the classes more distant from graduation, the addresses of these men being less certain and their immersion in absorbing business affairs being more complete. Beginning with 1910 the number of men engaged in the war work is 18 to 20 to a class, at 1914 the number rises to above 25, while the classes '17, '18, '19 and '20, which can be more readily reached and who are in more respondent mood, number 80 men, 96, 67 and 54 respectively.

In the regular army there are 87 Tech men, 17 of whom are somewhere in France, while the drafted men number 80 more. The majority of the men in the army have commissions although a few enlisted as privates. In the classes now in the school, 7 men were drafted from that of 1920, 16 from '19, 20 from '18, while of the men just graduated, 10 were selected for service in this way. The Coast Artillery Corps, the Engineer Officers' Reserve Corps and the Ordnance Reserve Corps have about the same number, the figures being 45, 49 and 48 respectively. The army aeronautical work has proved almost equally attractive for here there are 43 men enrolled, with 16 in the naval group. The other reserve corps have men in numbers from two or three to fourteen, the Signal Corps has 6, the Sanitary Corps an equal number, and the Engineers Corps has 17. Camps like Plattsburg or the American University Training Camp account for 21 of the students, while ambulance work abroad, in France or in the Balkans has taken 15 of the young men. In the Navy there are 18 men registered, one of them "somewhere in foreign waters," with five marines and a number in other branches, such as radio or the industrial duties that are to be found on mother and repair ships.

In industries allied to the war 76 men have reported themselves as at work. Of these 16 are in munition factories and 8 in chemistry, most of these in gas investigations, while 14 are employed in ship planning or construction. There are 4 inspectors, two electricians, one each in radio or aeroplane construction with 24 in the assorted variety of industries that have come to the front in this time of need.

RÉSUMÉ OF THE M. I. T. SERVICE LIST

Until the alumni office has the complete record from the men themselves, the records printed both in *The Tech* and in the REVIEW must necessarily be incomplete. On November first the record stands about as follows.

More than 750 students and graduates of the Massachusetts Institute of Technology are already in the service of their country. Of this number 200 men have been contributed by the three upper classes now in the Institute.

A close tally has been kept by the Alumni Headquarters of the enlistments of all the graduates, which shows that beginning with 1890 every class has some members in the service. Up to 1905 this number is, according to the questionnaire sent to all the alumni, only 2 or 3 to each class, while from 1906 until 1909 the registry is 6 or 7. Beginning with 1910 the number of men in the service rises to 18 or 20 to the class, while from 1914 to 1917 about 25 men from each class have answered the call. Last year's graduating class and the three upper classes now at the Institute have contributed 80, 96, 67 and 54 men respectively. These figures are constantly changing and every day sees more Institute men joining the colors.

In the regular army there are 87 Technology men, 17 of whom are already "somewhere in France," while the drafted men number over 80. The majority of the men in the regular army have commissions, although a few have enlisted as privates. In the classes now in the school 7 men were drafted from the class of '20, 16 from '19, 20 from '18, while the men just graduated have supplied 10 men for the National Army.

The Coast Artillery Corps, the Engineer Officers' Reserve Corps and the Ordnance Reserve Corps have claimed about the same number of Technology men, the figures being 45, 49 and 48, respectively. The army aeronautical work has 43 Institute men in its roll, while 16 men have enlisted with the navy flyers. Other reserve corps have claimed 20 members of the alumni in their services, while Plattsburg and other training camps account for 21 students. Ambulance work in France and the Balkans has taken 15 and the navy claims about 25 Technology men.

In industries closely allied to the work of the war 76 men have

reported and 6 of the alumni are instructors in the various schools of war. The Technology office in Washington has on record 1,000 men of engineering experience who will soon become active in the war industries.

TECHNOLOGY MEN IN FOREIGN SERVICE

Up to the time of going to press the following list is the most complete that can be secured of Technology graduates and undergraduates at present actually engaged in foreign service. Watch *The Tech* for additions:

Class of 1883

R. W. SCOTT, American Field Ambulance, France.

Class of 1887

H. P. SULLIVAN, Expert Aviation Division, France.

Z. B. ADAMS, member of Mass. General Hospital, Base Hospital.
Sailed June 25, 1917.

Class of 1888

HENRY J. HORN, Red Cross Comm. to Russia.

VAN R. LANSINGH, Chairman of the Wash. Dept., Technology Clubs Assoc.; also in charge of the Paris office. With National Defense Council, Paris.

EDWARD B. RICHARDSON, Capt, Battery A, 1st Reg., Field Art.
C.-E. A. WINSLOW, Red Cross Comm. to Russia.

Class of 1902

CHARLES G. MIXTER, Capt. M. R. C. Left for France September 1917.

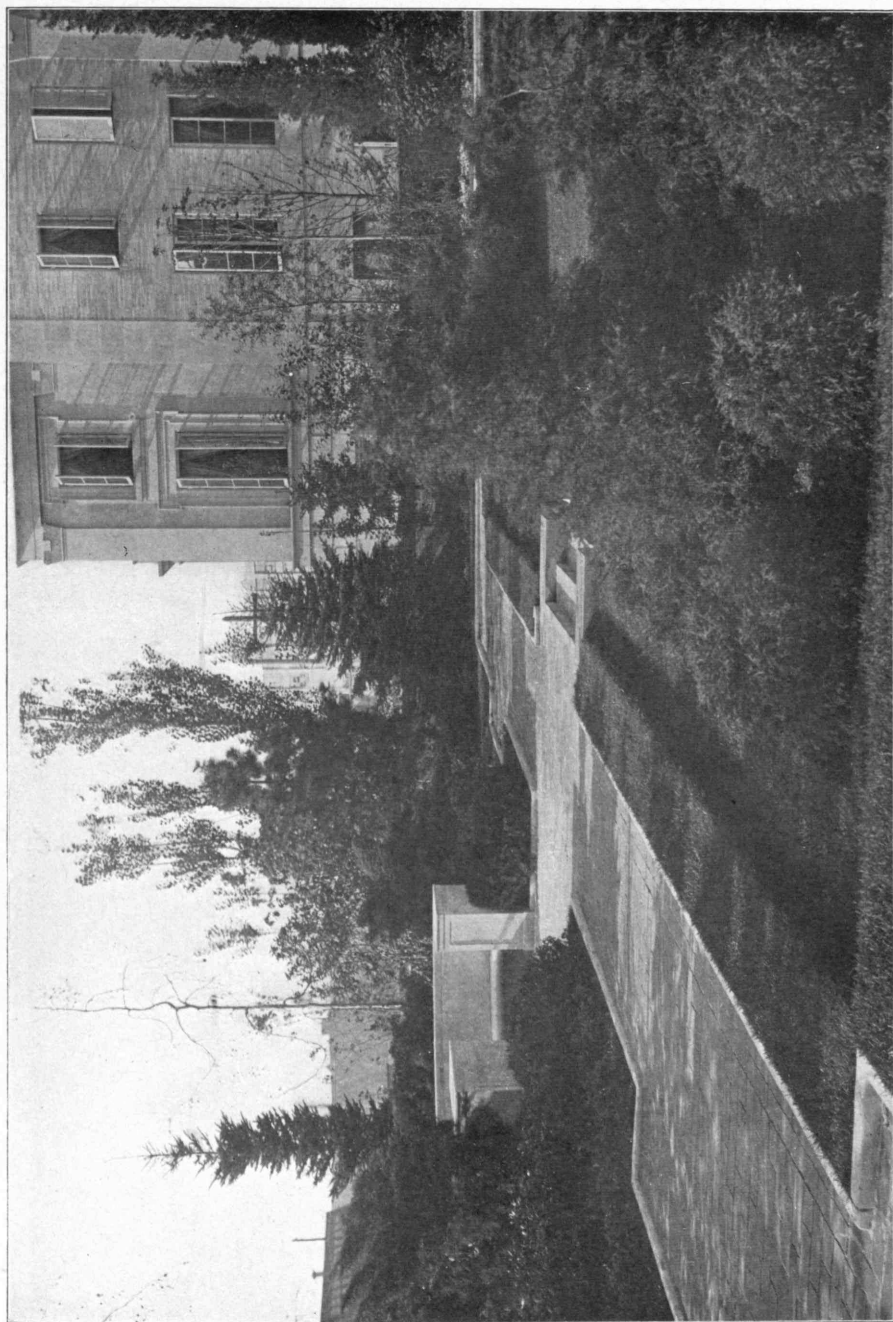
WILLIAM J. MIXTER, Capt. M. R. C, with Mass. General Hospital Unit. Address U. S. Army Hospital, Amer. Exped. Force, France.

Class of 1903

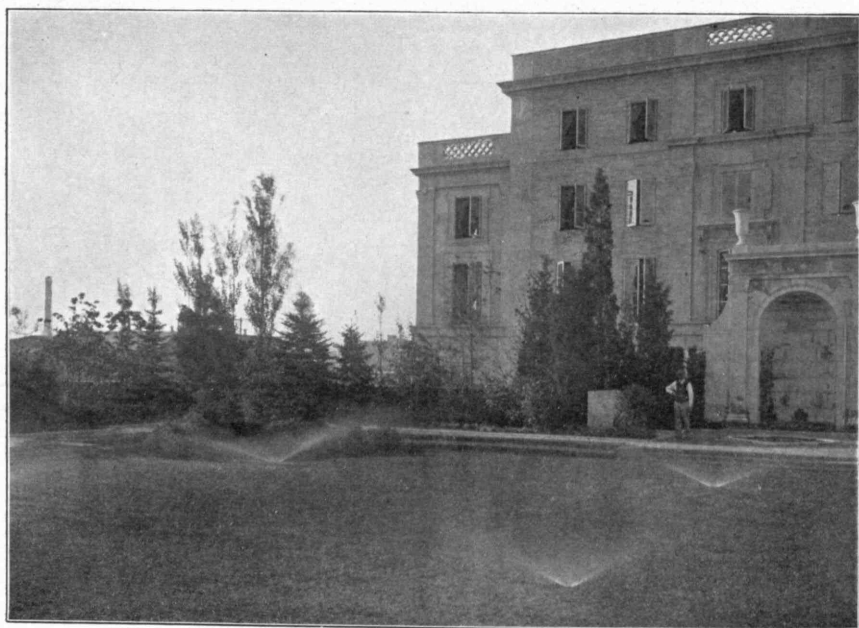
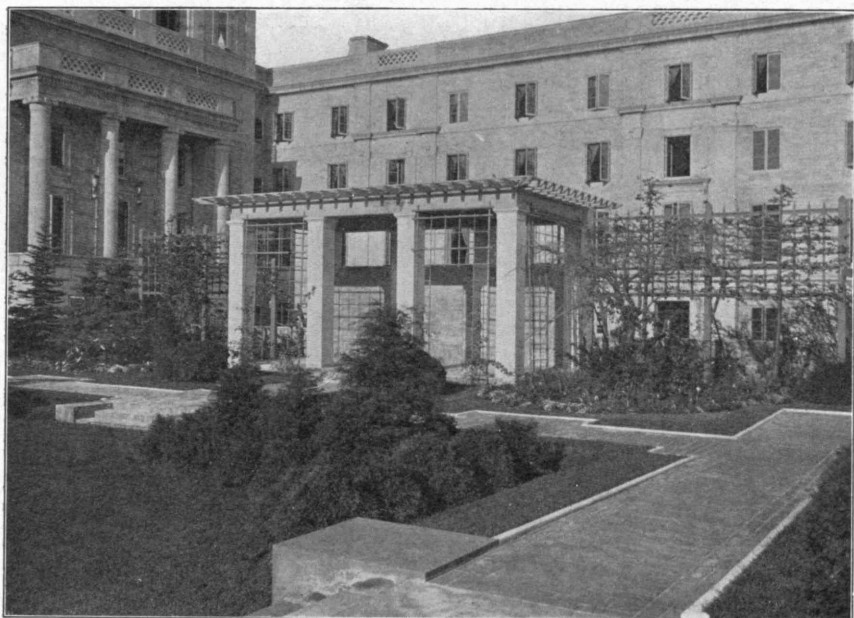
PAUL HALL, Capt. in France.

Class of 1904

PROFESSOR SELSKAR M. GUNN, Assoc. Director of Comm. for Prevention of Tuberculosis in France. Sailed July, 1917.



A GREEN CORNER IN MRS. MACLAURIN'S GARDEN



TWO VIEWS OF MRS. MACLAURIN'S GARDEN

Class of 1906

EDGAR C. STEINHARTNER, signed up with Cincinnati Base Hospital.

Class of 1909

PAUL H. LAZENBY, Capt. 2d Canadian Pioneers for '16 or '15. Allied Forces.

Class of 1911

RICHARD C. JACOBS, JR., Serg. (Prov.), 4th Engrs., Railway, France.

R. H. RANGER, 2d Lieut., Field Artillery, U. S. R. Military Observer, Amer. Exped. Force, France.

Class of 1912

F. N. BREED, 1st Ambulance Group. Sailed June 25, 1917.

Class of 1915

JAMES D. MCINTYRE, Prov. 2d Lieut., C. A. C., Reg. Army, France.

Class of 1916

R. M. ALLEN, 1st Ambulance Group. Sailed June 25, 1917.

A. HOLMES, 2d Lieut., E. O. R. C., France.

C. W. LAWRENCE, 2d Lieut., Amer. Exped. Force, France.

C. W. LOOMIS, SERG., 4th Engrs. Res., Railway, France.

Class of 1917

S. S. BATCHELDER, U. S. Army Aviation, France.

K. H. DAY, 1st Ambulance Group. Sailed June 25, 1917.

S. C. DOWNING, 2d Lieut., Field Art. Res., France.

D. C. TARPLEY, 1st. Ambulance Group. Sailed June 25, 1917.

Class of 1918

H. B. ALLEN, 1st Ambulance Group. Sailed June 25, 1917.

E. J. CAMERON, U. S. A. Army Base Hosp. No. 5, Brit. Exped. Force in France.

T. J. CAMPBELL, Aviation Corps, Fort Wood, N. Y., October, France.

F. W. CARY, in Munitions Div. A. F. S. Sailed June 20, 1917.

R. COLLIER, Corp., 4th Engrs. Res., Railway, France.

L. S. EDGARTON, to join Amer. Field Service in France.

DINSMORE ELY, 1st Ambulance Group. Sailed June 25, 1917.

Enlisted in Lafayette Escadrille.

- I. G. HALL, 1st Ambulance Group. Sailed June 25, 1917.
 E. V. HOLDEN, 1st Ambulance Group. Sailed June 25, 1917.
 F. L. KLINE, 1st Ambulance Group. Sailed June 25, 1917.
 E. R. PICKET, U. S. A. Base Hosp. No. 5.
 D. A. REED, JR., 1st Ambulance Group. Sailed June 25, 1917.
 W. B. RIDDELL, enlisted in Canadian Exped. Force, France.
 C. R. TUTEIN, driver of munitions truck, French Army.
 J. C. WOOTEN, 2d Lieut., Reg. Army, C. A. C., France.

Class of 1919

- L. B. CAHILL, 1st Ambulance Group. Sailed June 25, 1917.
 Amer. Field Service.
 F. G. ELWELL, Amer. Ambulance Field Service, France.
 G. W. ROOT, 1st Ambulance Group. Sailed June 25, 1917.
 KIMBERLY STUART, Balkans for seven months; in France; awarded
 the Croix de Guerre.

Class of 1920

- J. N. DU VERNET, enlisted in Canadian Engrs. for war and six
 months after peace.
 J. R. MILLIKEN, 1st Ambulance Group. Sailed June 25, 1917.
 E. P. GRIESEMER, 1st Ambulance Group. Sailed June 25, 1917.

THE FACULTY AND INSTRUCTING STAFF

The demand for highly trained technicians has caused many changes in the instructing staff at the Institute. Fifty-seven professors and instructors have resigned or are on leave of absence to fill positions of national importance. The Department of Chemistry suffered most, losing sixteen men. The Department of Electrical Engineering lost fourteen men while the Department of Mechanical Engineering lost twelve.

A list of professors and instructors follows, with a brief statement of the kind of work in which they are engaged:

Department of Mechanical Engineering

- J. C. RILEY, Associate Professor of Heat Engineering. Major
 in Coast Artillery.
 A. L. BROWN, Instructor in Mech. Eng. Lieut. Ordnance Dept.
 now stationed at Springfield.
 M. C. MACKENZIE, Instructor in Mech. Eng. Industrial work
 in Concord, N. H.

- W. J. BARRETT, Assistant Instructor in Mech. Eng. Lieut. Ordnance Dept.
- S. R. BARTLETT, Instructor in Mech. Eng. Engineering Dept., Stone & Webster Eng. Corp.
- H. W. BROWN, Assistant Instructor in Mech. Eng. Lieut.
- C. A. COLEMAN, Assistant Instructor in Mech. Eng. Lieut.
- D. A. FALES, Assistant Instructor in Mech. Eng. Instructor in Gas Engine work in Aviation Schools.
- A. S. MORRISON, Assistant Instructor in Mech. Eng. Lieut. Ordnance Dept.
- J. T. SHORROCK, Assistant in Machine Tool Work. Industrial work.
- D. PEABODY, Instructor in Mech. Eng. Drafted but exempted on account of his work at the Institute.
- A. A. PACKARD, Instructor in Mech. Eng. Rochester, N. Y. Hohman & Maurer Co.

Department of Civil Engineering

- H. SUTHERLAND, Instructor in Civil Eng. 1st Lieut. 8th Engineers, Training Camp Stewart, Fort Bliss, Texas.
- F. W. BOWLER. 2d Lieut. E. O. R. C., 301st Engineers, Ayer, Mass.
- H. B. LUTHER, Instructor Civil Eng. Bureau of Construction and Repair, Navy Dept., Washington, D. C.

Department of Mining

- A. SAUVEUR, Professor of Metallurgy and Metallography. Working for French Government—presumably along metallographical lines.

Department of Chemistry

- J. F. NORTON, Assistant Professor of Chemistry of Sanitation. Resigned to accept position in Department of Biology, University of Chicago.
- W. H. WALKER, Professor of Chemical Engineering. On leave of absence. Gas Defence, Bureau of Mines, Washington.
- J. F. NORRIS, Professor of General Chemistry. On leave of absence. Gas Defence, Bureau of Mines, Washington.
- C. K. REIMAN, Instructor in Inorganic Chemistry. Resigned to undertake Research in Physiological Chemistry at Peter Bent Brigham Hospital.

- F. H. SMYTH, Instructor in Inorganic Chemistry. Leave of absence. Gas Defence, Bureau of Mines, Washington.
- D. MACRAE, Instructor in Inorganic Chemistry. Resigned. Westinghouse Lamp Co., Bloomfield, N. J.
- W. R. CRANDALL, Assistant in Analytical Chemistry. Resigned. Benzol Products Co., Marcus Hook, Pa.
- P. P. GOODING, Assistant in Theoretical Chemistry. Resigned. Eastern Manufacturing Co., Bangor, Me.
- G. M. MAVERICK, Assistant in Industrial Chemistry. Resigned. Commissioned in Ordnance Dept.
- J. V. MEIGS, Assistant in Technical Analysis. Resigned. Barber Asphalt Paving Co., Maurer, N. J.
- H. WU, Assistant in Organic Chemistry. Resigned. Graduate work at Harvard.
- J. M. HOOD, Assistant in Chemistry of Foods. Resigned. Drafted, now at Camp Devens, Ayer, Mass.
- M. S. WELLINGTON, Assistant in Chemistry of Sanitation. Resigned. N. Y. Continental Jewell Filtration Co., New York, N. Y.
- R. E. WILSON, Research Associate in Applied Chemistry. On leave of absence. Gas Defence, Bureau of Mines, Washington.
- R. V. DAVIES, Assistant in Analytical Chemistry. Resigned. Fore River Shipbuilding Corp., Quincy, Mass.
- S. L. CHISHOLM. Drafted, now at Camp Devens, Ayer, Mass.
- R. G. KNOWLAND, Research Assistant in Applied Chemistry. Resigned. Commissioned in Ordnance Dept.

Department of Biology

- S. M. GUNN, Associate Professor of Sanitary Biology and Public Health. Associate Director American Anti-Tuberculosis Commission, 218 Rue de Rivoli, Paris.
- E. C. HOWE, Instructor in Biology. Professor of Hygiene, Wellesley College.
- M. P. HOROWITZ, Assistant in Biology. Now Instructor in Biology, M. I. T.
- P. G. STILES, Instructor in Physiology and Hygiene. Assistant Professor of Physiology, Harvard and Radcliffe.
- E. A. INGHAM, Instructor in Biology and Public Health. District Health Offices, State Dept. of Health of California.

Department of Electrical Engineering

- F. G. PERRY, Instructor. Captain, Coast Artillery, Fort Monroe.
- H. B. RICHMOND, Instructor. 1st Lieutenant, Coast Artillery, Fort Monroe.
- R. F. ZECHA, Instructor. Inspector of Machines, Fore River Ship Yards.
- W. B. LITTLEFIELD, Assistant. 1st Lieutenant, Coast Artillery.
- G. W. WYMAN, Assistant Instructor. Instructor in Ground School, M. I. T.
- E. W. BOWLER, Research Assistant. 1st Lieutenant, Engineer Corps.
- W. E. WYNNE, Research Assistant. Private, Field Artillery.
- C. W. GREEN, Assistant Professor. Captain, Coast Artillery, Fort Monroe.
- R. J. WISEMAN, Research Assistant. Research Department, Western Union Telegraph Co.
- P. L. ALGER, Research Assistant. U. S. Proving Ground, Ballistic Research, Sandy Hook.
- G. Y. ALLEN, Research Assistant. Bureau of Steam Engineering, Washington.
- R. S. BURNAP, Research Assistant. Research Department, General Electric Co. Lamp Works, Harrison, N. J.
- H. N. CARLSON, Assistant. In charge Signalling and Radio Dept. Army and Navy School, M. I. T.
- H. F. DODGE, Assistant. Submarine Research Work, Western Electric Co.

Department of Naval Architecture

- W. HOVGAAARD, Professor of Naval Design and Construction. Leave of absence. Bureau Construction and Repair, Navy Department, Washington.
- H. H. W. KEITH, Assistant Professor of Naval Architecture. Leave of absence. Enrolled Naval Reserve. Lieut., Jun. Grade for engineering duty Bureau Construction and Repair, Navy Yard, Boston, Mass.
- H. LARNER, Assistant Instructor in Naval Architecture. Enrolled Naval Reserve, Ensign, Jun. Grade for engineering duty, Bureau Construction and Repair, Navy Yard, Boston, Mass.

ALEXANDER KLEMIN. On half time. Consulting Aeronautical Engineer, Bureau Construction and Repair, Navy Department, Washington, D. C.

Department of English

W. B. PRESSEY, Instructor in English. Private, 96th Co. U. S. Marines, Port Royal, S. C.

J. K. TORBERT. Drafted.

A New Technology Club in China

A new Technology Club was organized in Peking, China, on September 27, 1917, at a tiffin given in honor of Professor George C. Whipple, '89, and Professor C.-E. A. Winslow, '98, members of the American Red Cross Mission to Russia, on their return trip to America. Eight Tech men were present, Gerard Swope, '95, member of the Corporation, H. R. Putnam, '09, Z. Z. Chow, '14, W. G. Loo, '13, Dr. C. Y. Wen, '08, and Y. T. Ying, '14. Dr. Wen was elected president and Mr. Chow, secretary and treasurer.

The tiffin was characteristically Chinese, the menu including such delicacies as bird's nest soup, shrimp, shark's fins, stringed chicken, bamboo shoots, duck livers, and ending as usual with rice and tea. The conversation related to the influence of Technology in China, and it was learned that all four of the Chinese alumni are in the service of the Chinese Republic. Loo is a deputy special naval constructor in the Ministry of the Navy; Ying is in the ordnance department of the Ministry of War; Chow is chief engineer and technical expert of the Ministry of the Interior, and Wen is professor of mining in the Government University.

Through the influence of this new organization, the relations between America and China will be drawn still closer. Professor Whipple was asked to convey the greetings of the new club to President Maclaurin and the members of the Institute Faculty.

YOUNG ALUMNI TEACH THE AVIATORS

The teaching staff of the military and naval aviators of the ground school now quartered in the Walker Memorial at the Institute numbers not only many of the regular teaching staff of the necessary Institute departments but also a number of recent graduates who are getting their first taste of teaching. The boys are going at the work with splendid seriousness and are showing a competence and an ingenuity in adapting themselves to the not easy task of scientific instruction in a way that speaks highly for their own training in the Institute. Their position is not made any easier by the fact that many of them are actually younger than the men they are teaching. An afternoon spent with them in the old Stone and Webster service building behind the Walker Memorial shows that among the various occupations Technology men can qualify for in helping to win the war, that of teaching our soldiers is not the least nor the least well done.

The following from the faculties of the army and navy schools of aeronautics:

ARMY AERONAUTICS

Commander, Captain Fred A. Seydell, U. S. A.; President of the Academic Board, Professor C. H. Peabody; Dean of the School, Charles J. Emerson, '04.

Department of Engines: Dean A. Fales, '15 (in charge); N. C. Macdonald, assistant in airplane engines; S. P. Mills and Wallace S. Thomas, '15, instructor; A. Matheson, instructor in internal combustion engines; G. Goethe, lecturer in magnetos; and Ellery C. Wood, '16, and W. J. Eastman.

Department of Signalling: H. N. Carlson, '13 (in charge), instructor in wireless; A. F. Murray, '18, assistant in signalling; H. C. Weber, '18, assistant in wireless telegraphy; and Harold G. Brown, '17, and A. E. Powell, '20, in miniature range.

Department of Aeronautics: Alexander Klemin, '16 (in charge), instructor in aeronautics; Francis V. DuPont, '17, instructor in aviation; M. Wauters, instructor in sail making; J. Denkinger, instructor in rigging and landing, and Stephen S. Mason, assistant in rigging; Professor R. C. DeWard, instructor in meteorology;

Professor Charles B. Breed, '97, instructor in navigation, and Walter Humphreys, '97, instructor in astronomy.

Department of Calisthenics: F. M. Kanaly (in charge); M. E. Kanaly, instructor.

Department of Military Science: Lieut. E. J. Wesson, U. S. A., Lecturer on military law; Lieut. C. H. M. Roberts, '17, U. S. A., Lecturer on foreign armies; Lieut. A. L. Benson, '17, U. S. A., Lieut. C. G. Miller, '17, U. S. A., and Cary B. Easley, '16, instructors in military science; Acting-Adjutant Leon L. McGrady, '17, administrative work, and H. J. Smith, assistant in machine guns.

NAVY AERONAUTICS

Commander, Lieut. E. H. McKitterick, U. S. N.; President of the Academic Board, Professor C. H. Peabody, Dean of the School, Harrison W. Smith, '97.

Department of Seaplane Motors: Dean A. Fales, '15 (in charge); W. R. Herfurth, '91, G. W. Wyman, C. L. Merrill, A. E. Windle, '16 and E. P. Warner, '17, instructors.

Department of Signalling: H. N. Carlson, '13 (in charge); E. W. Whittier, A. P. Southworth and N. S. Marston, '11, instructors.

Department of Aeronautics: Alexander Klemin, '16 (in charge); R. H. Sawyer, '17, and E. W. Rounds, '17, instructors.

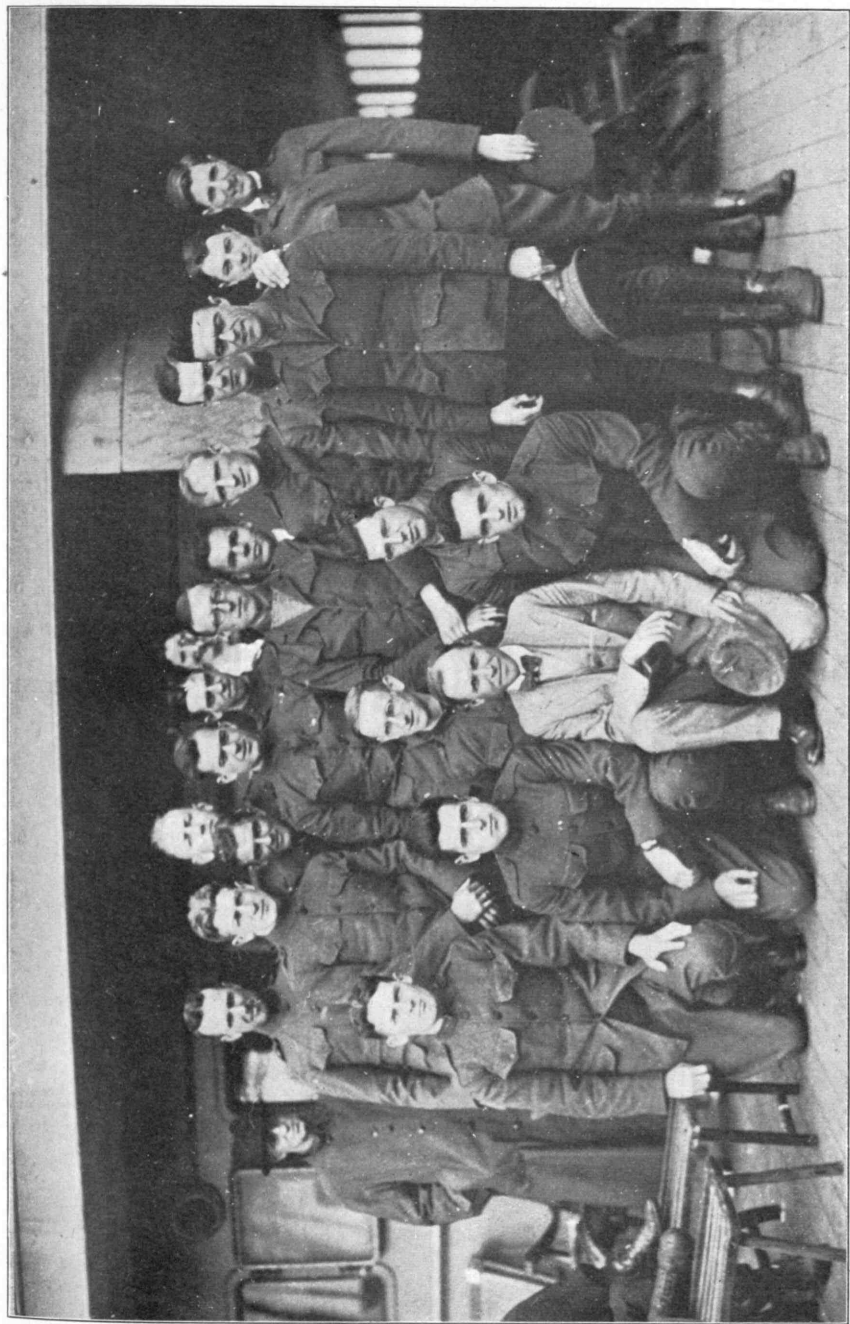
Department of Meteorology: Professor Frank Waldo.

Department of Calisthenics: J. A. MacDonald, '16.

Department of Military Science: Leicester F. Hamilton, '14 (in charge); H. E. Collins, '18, assistant.

Department of Gunnery: G. D. Haskell, assisted by the chief gunners mates.

Department of Seamanship and Navigation: Harrison W. Smith, '97 (in charge); E. B. Breed, '93, and Russell White, '16, assistants.



THE FIRST TECHNOLOGY AMBULANCE UNIT ON BOARD "THE ROCHAMBEAU"

Van Rensselaer Lansingh, '98, in the centre of the group.



VAN RENSSELAER LANSINGH, '98
Director of the Technology Club of Paris.

THE WAR SERVICE AUXILIARY

Its purpose to be a friend to Technology men at the front
and their families

Just organized friendliness! That is what the War Service Auxiliary of Technology considers its work and hopes that everyone interested will consider their work as well. It arose from small and scattered beginnings, it felt its way towards usefulness throughout the summer, but now as the school year opens, when Technology men are at Ayer, in France, in Washington, scattered all over the country, leaving their people behind them often at a loss to know how to send them comforts, the Auxiliary has struck its gait, become coördinated and is big with plan of service.

The July number of the REVIEW told what the beginnings were. The help in equipping the military camp at East Machias and the hastily formed plan which resulted in the Tech Club of Paris and, later, in the great American University Union of which it is to be a part. But the needs have grown, become complex and special, with the result that careful committee organization was needed and secured.

The Auxiliary is empowered by the M. I. T. Committee on National Service and works in coöperation with it. Its business, as it said in the circular which has been sent out to every Technology graduate appealing for funds for books, comforts and the like, is to render every possible assistance to Technology men engaged in the war and to the families which they have left behind.

First, the Auxiliary plans to get in touch and keep in touch with every man in service. The Alumni Association is engaged in securing a complete registration of these men and this list will be the basis of the work. The Auxiliary will also try to secure lists of Technology men at the great training camps, such as Ayer, Mass., and the Camp Committee will make a point of reaching these men and finding out what they need in the way of comforts and amusements which the government cannot provide, and of seeing that they get them. Toilet articles, for instance, comfort kits, books and magazines, knitted goods of all kinds. These will be made at the work-room or bought with funds provided by the alumni and friends and sent where they are needed.

Next, the Auxiliary invites all relatives and friends of men in service to make themselves known to the committee and to join in the work. In return the Bureau of Communication will aid them as far as possible to keep in touch with their absent ones and to furnish a medium of communication of gifts and letters. A good way, says the committee, is for any friends of Technology who wish to make a point of keeping in touch with a particular man, to correspond with him, send him magazines and the like. Finally, if the fortunes of war leave the family of any Technology man at a loss in any way, the Auxiliary wishes to know it that it may offer its sympathy and services. It is hoped that in every large centre some friend may be secured to act as chairman for that town and aid in linking the people there up to the central committee.

The Auxiliary will also reinforce the work of the Technology Club in Paris now a part of the American University Union. The club and the Auxiliary will be the means of communication between the boys and the folks at home. The club is hard up for many things that we take as a matter of course in America but which cannot be secured abroad. Every cable brings appeals, not for money, but for specific things like thermos bottles and toilet articles and kodak films and magazines, and above all for warm knitted things. The Auxiliary will buy these from its funds and send them over, or will act as agent for goods brought in by the friends and relatives of Technology men. It has also established a work-room in the old Rogers Building on Boylston Street, Boston, open on Monday and Thursday afternoons and on Tuesday and Friday mornings, where knitting machines and material for two months' work has been supplied by a friend. The good this work-room can do is limited only by the funds at its disposal and by the voluntary labor of Technology women and men. Whether officially connected with the Institute or not, so long as they are interested in Technology men, all are invited to come in as often as they can and work, with materials provided by the Auxiliary, on knitted goods, pajamas, clothes-bags, hospital supplies, shirts and gowns, comfort kits, Christmas boxes, and even on scrap-books.

There is also a committee which intends to get into touch with the men in the government schools at the Institute, not to offer any substitute for natural social life since that seems neither possible nor desirable, but to care for their physical needs, to get them

clothes-bags, get their mending done, offer books and other little conveniences.

The Book Committee has been sending out small, stout boxes to the men in the training camps, each holding about twenty volumes, carefully selected to fit the taste of the average young man who needs recreation. Over 700 books are already out. Each box is put in charge of a Technology man who is to care for the books, read them, see that other Tech men get them, and then pass them on to an Institute man in another company. It is not intended to compete with the Camp Library plan, whose authorities recognize the personal service the Auxiliary is doing and highly commend it. Nor is there any intention of duplicating the efforts of the Red Cross or any other large organizations which must necessarily be somewhat impersonal in its objects. The aim of the Technology Auxiliary is personal service for Tech men. Every bullet, so to speak, must have its billet; every comfort must go to a man from the Institute.

In short it boils down to this: Every man or woman who has a relative from Technology in the service, everyone however remotely connected with the Institute, everyone who feels any interest in the school and the men it turns out, is urged to call or write to the Auxiliary War Service Committee, and will be told what there is to be done in all the various branches, and helped—nay, urged—to do his personal bit for the boys in service. Mrs. Cunningham, chairman of the Central Committee, is always to be found on the job and will do the rest.

Many of the names on the committees are well known to those acquainted with Institute activities. More should be. If you cannot come in and work, send your money. Both are welcome.

Central Committee—Mrs. Edward Cunningham, chairman, Miss Mabel K. Babcock, Albert F. Bemis, Prof. Henry Fay, Mrs. Harry M. Goodwin, Mrs. Frederick T. Lord, Prof. Harry W. Tyler, Miss Evelyn Walker, Mrs. Edwin S. Webster, Mrs. A. J. George, executive secretary.

Chairman of Committees—Camps, Mrs. Franklin W. Hobbs; Government Schools at M. I. T., Mrs. Frederick T. Lord; Bureau of Communication, Mrs. Henry P. Talbot; Work-room, Mrs. Edward Cunningham, Mrs. William T. Sedgwick, director, Miss

Evelyn Walker, assistant director; emergency, Mrs. Samuel J. Mixter.

Advisory Committee—Mrs. Albert F. Bemis, Mrs. Henry F. Bigelow, Mrs. Arthur T. Bradlee, Mrs. J. Randolph Coolidge, Jr., Mrs. Ralph Adams Cram, Mrs. Davis R. Dewey, Mrs. Hollis French, Mrs. Franklin W. Hobbs, Mrs. Walter Humphreys, Mrs. Arthur D. Little, Mrs. Guy Lowell, Mrs. Charles T. Main, Mrs. Samuel J. Mixter, Mrs. James P. Munroe, Mrs. Cecil H. Peabody, Mrs. Henry G. Pearson, Mrs. James W. Rollins, Mrs. William T. Sedgwick, Mrs. Harry W. Tyler, Mrs. C. Howard Walker, Mrs. George Wigglesworth.

Honorary Committee—Mrs. Richard C. Maclaurin, Boston; Mrs. Francis A. Walker, Boston; Mrs. Ira Abbott, New York; Mrs. William H. Bovey, Minneapolis; Mrs. T. Coleman du Pont, Wilmington; Mrs. John R. Freeman, Providence; Mrs. Francis R. Hart, Boston; Mrs. Ralph H. Howes, New York; Mrs. F. W. Lovejoy, Rochester, N. Y.; Miss Margaret E. Maltby, New York; Mrs. Stanley McCormick, New York; Mrs. John Lawrence Mauran, St. Louis; Miss Susan Minns, Boston; Mrs. Theodore W. Robinson, Chicago; Mrs. Everett Morss, Boston; Mrs. Frank E. Shepard, Denver; Mrs. John L. Shortall, Chicago; Mrs. Frank A. Smythe, Lorain, Ohio; Mrs. Charles A. Stone, New York; Miss Marion Talbot, Chicago; Mrs. William M. Taylor, Indianapolis; Mrs. Henry M. Waite, Dayton, Ohio; Mrs. George V. Wendell, New York; Mrs. C.-E. A. Winslow, New Haven, Conn.

AMERICAN UNIVERSITY UNION IN PARIS

The Technology Club of Paris merges with the larger body
in taking care of college men abroad

Early in October Van Rensselaer Lansingh, '98, director of the Technology Club of Paris, made the following announcement in the newsy little bulletin which he issued weekly at the little place at 7 Rue Anatole de la Forge:

"The Technology Club of Paris will be merged (but not sub-merged) in the American University Union or Club. Those of us who have had the opportunity of living at or visiting the present club will hate to see the club, with its homelike features, disappear, but the Tech Club was only started to bridge over the time until the larger University Club idea could be put into concrete shape. It has served its purpose. However Tech will not be lost in the new club. Your director is planning to have in addition to the general club rooms, a large living room especially for Tech men where they can get together or be at home at all times. Also the little conveniences, so much appreciated by those who come short handed will still be there. In other words, we will have our own little club, with, at the same time, all the advantages of the University Club. Some cinch!"

On October 20, the merger took physical shape when the Technology Club abandoned its rooms and moved in with the University Union at the large and commodious Hôtel Palais Royal, in the centre of old Paris, on the Place du Théâtre and Rue de Richelieu. Situated near the Comédie Française, the Louvre and the Pont du Carrousel, which leads into the *Quartier*, the new situation of the club cannot but prove a great advantage to Technology men on leave and eager to enjoy at once the best Paris affords. The hotel has been rented for one year by the Union, which is supported by fifty of the most representative colleges and universities and is designated "to meet the needs of American university and college men who are in Europe for military or other services in the cause of the allies."

The trustees of the Union are as follows: John H. Finley, president of the University of the State of New York; Frank J. Good-

now, president of Johns Hopkins University; Edward K. Graham, president of the University of North Carolina; John Sherman Hoyt, of Harvard; H. B. Hutchins, president of the University of Michigan; Dwight W. Morrow, of New York City; Roger Pierce, secretary of Harvard Corporation; Phelps Stokes, secretary of Yale University; Henry B. Thompson, trustee of Princeton.

Forty of the eighty bedrooms were occupied the first night and visitors representing thirty different American colleges registered. An informal dinner was held which was attended by the Executive Committee comprised of Professor Nettleton of Yale, director; Mr. Van Rensselaer Lansingh, '98, of the Institute, assistant director; Mr. James Hazen Hyde of Harvard; Professor Van Dyke of Princeton, and Professor Vibert of the University of Michigan; also by members of the Advisory Committee of which Mr. Edward Tuck of Dartmouth is chairman. General Pershing, who is one of the honorary patrons of the Union, was officially represented by Brigadier-General William H. Allaire. Ambassador Sharp had planned to be present but was prevented from doing so by an attack of slight illness and sent a message expressing his hearty approval of the work.

The Union in Europe has resulted from the culmination of two movements, one in Paris and the other in this country. The first factor in its development was the authorization of the Yale Bureau in Paris last May. The founding of the Yale Bureau was not, at that time, intended for anything more than rendezvous for Yale men. However, with the establishment of the American University Alumni Association in France but one month later and the formation of a Technology Club by Mr. Lansingh in July, the leaders of these three movements saw the wisdom of consolidation, and, after a thorough discussion of the matter both here and in France, the American University Union in Europe was given birth.

The specific purposes of the Union are perhaps best made known by quoting directly from its constitution. Stating its purpose it reads:

"1. To provide at moderate cost a home with the privileges of a simple club for American college men and their friends passing through Paris or on furlough; the privileges to include an information bureau, writing and newspaper room, library, dining room, bedrooms, baths, social features, opportunities for physical recreation, entertainments, medical advice, etc.

"2. To provide a headquarters for the various bureaus already established or to be established in France by representative universities, colleges and technical schools.

"3. To coöperate with these bureaus when established, and in their absence to aid institutions, parents or friends in securing information about college men in all forms of war service, reporting on casualties, visiting the sick and wounded, giving advice, serving as a means of communication with them, etc."

"The members of the Executive Committee first planned to secure a hotel in the residential district of Paris, but owing to the war-time difficulties of transportation it was thought better to place the headquarters of the Union nearer the center of Paris. As a result the Royal Palace Hotel, which is at the head of the Avenue de l'Opera and near the Louvre and the Tuileries Gardens, was selected. It is also within a block of the Palais Royal subway station.

"Board and lodging at the Union are made just as cheap as abnormal expenses will permit. The restaurant provides luncheon for four and a half francs and dinner for five and a half francs, addition to an exceedingly reasonable 'petit dejeuner.' Members on furlough can secure 'pension' at from fifteen francs and upward per day with everything included. A room for a single night costs from six francs up; a room with bath, ten francs. In view of the enormous cost of supplies in Paris, where anthracite coal sells for \$70 a ton, the tariff is indeed moderate, especially since the franc at present is only rated at seventeen and one-half cents."

But although the American University Union will be conducted on a much larger scale than the modest establishment at the Rue Anatole de la Forge, it must not be forgotten that Mr. Lansingh was first in the field, sailing with the Technology Ambulance Unit in June, and was thereby able to give to Tech men throughout the summer "all the comforts of home."

Not only his own bulletins offering service to Tech men but the testimony of men from other colleges, associated with him in getting the University Union underway, bear witness to his excellent work. There were provided for Tech men—and others as well—not only food and lodging at reasonable rates, but many other things. He kept them supplied with copies of *The Tech*, which were eagerly read, as American news and especially Tech news was scarce; he supplied films and prints for films the men brought in; he

got Course IV men admitted to the Beaux Arts; he kept a service bureau whereby men at the front could send in for what they needed on credit; he issued bulletins of information, lists of visitors and home news; he kept address lists; acted as banker, furnished unprepared men on furlough with toilet necessities *ad lib*—in short did everything one man could think of to make the boys feel at home. His regulations of club hours give a taste of his quality.

"The Club is open at all reasonable hours to those not living here, and at all unreasonable hours to those who are. If the director is not at home to welcome you, introduce yourself anyway and see what it feels like to be at home."

As one of his Technology men writes home:

"Imagine my surprise when after a year of service with the American Ambulance Field Service I drifted back to Paris from Albania to find this attractive club waiting for me. Mr. Lansingh was most kind and made me feel very much at home in the most luxurious place I have been in for over a year. It looked mighty cozy and fine to me after Verdun mud with seven months of the Balkans on top of five and a half at the former place.

"Now I hear that there is to be a big University Union for all of the college men here. I am sure that it will be welcomed with enthusiasm and will probably be overcrowded all the time.

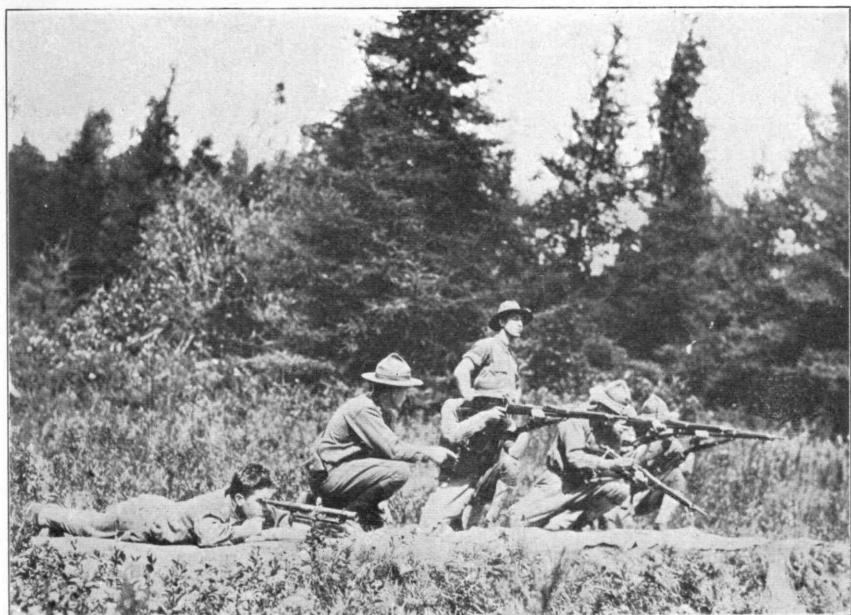
"It will have to 'go some,' however, to look any better to me than this club has done.

"I personally wish to express my keenest appreciation of what your generosity has done for me, and to thank you very much for your share in bringing this club into being."

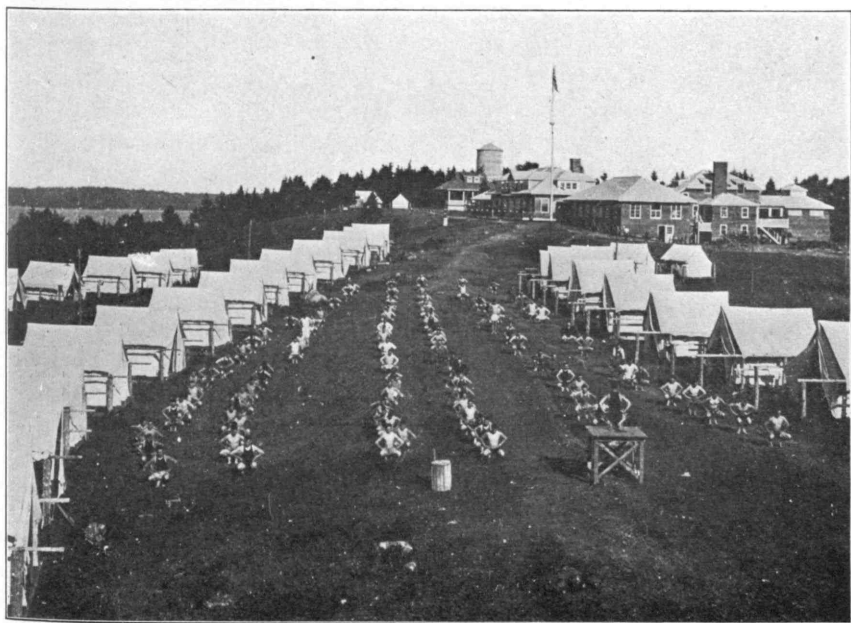
And Professor Nettleton of Yale, arriving in Paris to coöperate with Lansingh in founding the University Union wrote:

"You see I have been adopted as a Tech man. Mr. Lansingh has very kindly taken both Dr. Van Dyke of Princeton and myself into his admirable club. He has, I know, sent you his circulars describing his club, but I am sure that he has not told you fully how great and how genuine has been his success in organizing this smaller club which, at the proper time, is to be merged into the larger American University Union.

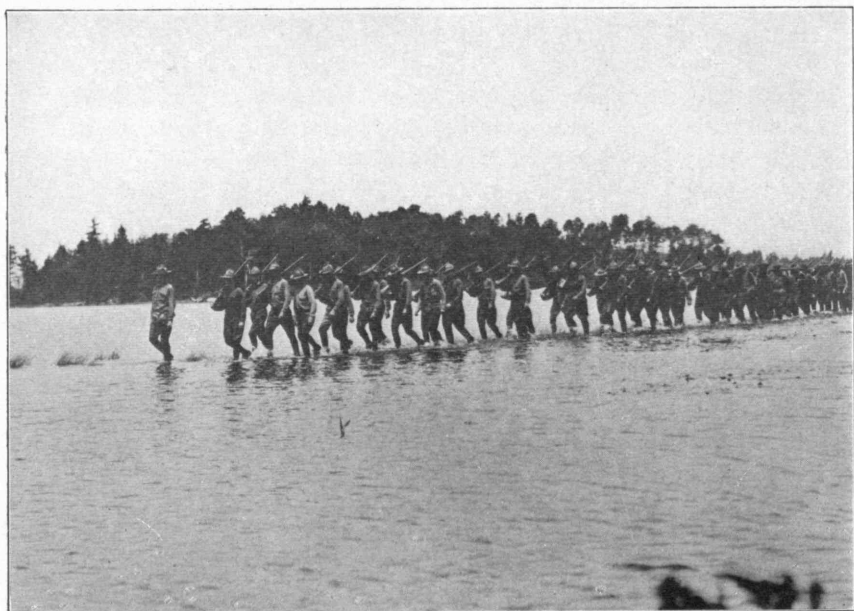
"He has entertained already a number of boys back from the front and has given them a real home. He looks after their comfort in every way, develops their kodaks, cashes their checks, executes little purchases and commissions for them, and, in short,



IN THE RIFLE PITS AT SUMMER CAMP



BIRDS-EYE VIEW OF CAMP AT EAST MACHIAS



A WET HIKE NEAR EAST MACHIAS



FIELD DAY AT THE CAMP—THE TUG-O'-WAR

does everything possible to make them feel at home even in a foreign land. That he has done so much already is all the more wonderful since he has been away twice from Paris on his official governmental business, but he has organized his staff so effectively that the machinery runs on even when he is not here himself. I cannot speak too highly of the energy and effective executive ability which he has shown in getting the Tech club running so promptly.

"I wish you could look in upon this place and see how admirably your idea has already been visualized. Every now and then a khaki-clad figure pops into the room where I am writing, and the talks that we have had with these boys who have been driving ambulances or trucks at the front have been absorbingly interesting.

"I did not mean to write you in such detail, but I am so enthusiastic about what Mr. Lansingh has already accomplished here that I know you will pardon me."

When the committee of the American University Union had their organization completed, they found that Mr. Lansingh had been so hospitable and helpful and efficient in his coöperation with them that he was at once appointed assistant director of the larger Union into which the Technology Club was merged. In his stead Robert M. Allen, '16, was appointed acting director. At the latest meeting of the Committee for National Service, I. B. Hazelton, '97, was appointed permanent director of Technology interests in the University Union Club.

A formal tribute to Mr. Lansingh's work was paid by Professor Nettleton of Yale and Van Dyke of Princeton, the organizers of the work of the University Union in Paris, as follows:

"We wish to express to the Trustees our great appreciation of the very successful work done by Mr. Lansingh, previous to our arrival, in establishing the Technology Club. Since coming to Paris we have lived with him and have seen most intimately how welcome the home-like and friendly atmosphere he has succeeded in creating in his modest little establishment is to the many young men who pass through his hospitable doors. He has not limited his hospitality to Technology men but has welcomed with open arms men from other colleges who have come to him. The marked success of his experiment on a small scale has greatly encouraged us in our undertaking and has been most useful as an introduction for the idea of our work on a broader and more general basis. This Technology Club will at once be merged into our Union head-

quarters and he will bring us at the outset a very notable and welcome addition to our resources and will be a strong spiritual force in the formation of the atmosphere of the headquarters of our Union."

And finally, to show the importance of the idea which struck those interested in our men at the front back in June before the Union was thought, and set them to work at once, doing their bit on the spot immediately, till the coöperation with other universities should materialize, we quote part of a letter from Anson Phelps Stokes, secretary of Yale University and chairman of the Trustees of the American University Union:

"I think the hearty spirit of coöperation and interest in the broad plan for all colleges which Tech men showed at the meeting in New York was one of the most important factors in assuring the ultimate success of the American University Union idea. I think you are to be congratulated on having so good a representative as Mr. Lansingh to care for the interests of Tech."

Today, the Technology Club in Paris is housed with the organizations of other universities in one big club house. But our bureau must be supported from this side. The Institute has already sent out an appeal for funds to support this and our other activities. Mr. Lansingh is cabling home every week for supplies which money cannot buy over there. If you want to know what is wanted inquire of the War Auxiliary Service Committee at the Rogers Building in Boston. There you can find out what is needed; through the committee you can send books, comfort kits, knitted goods, toilet accessories, the thousand and one things the boys want—and can't get over there. If you can't send goods, send money to buy the goods. *And do it NOW!*

What the Technology Club of Paris is Doing

VAN RENSSELAER LANSINGH, '98

As some men may want to know what the Technology Club of Paris is really doing, I will try to outline here some of the activities, but you will understand that our field of usefulness is growing every day with increased knowledge and increased clientele.

First and foremost we try to make a home for Technology men who come to Paris, not only in the sense of physical comforts, but

also advising them as regards their work over here, their transfer to branches of service where they seem better fitted. If you could only see how the college men are flocking out to this hotel, although means of transportation out here are difficult, you would realize what it means to the men who have been up to the front to come back to Paris and strike what they call home.

Of course we do small things for the men which, despite the fact that they are small, are nevertheless appreciated. For example, our photographic department handles from 200 to 500 photographs every week and the system is such that the men can get copies of any prints they are interested in by simply writing to the club for them. We do all sorts of errands for the boys, such as sending them books, tobacco, etc. We obtain information for them, follow up their mail when it goes astray and are the means of communication with parents back home when they hear of the boys' sickness.

Moreover, we are prepared, whenever necessary, to visit the boys in the hospital, and Dr. van Dyke, on whom most of this work falls, is looking after the boys who are in the hospitals around Paris. Fortunately no Technology boys have yet been hurt, as far as I know. That is a service which will later, at least, be very much appreciated. Then, of course, in the case of any man's death we will do all in our power to see that all arrangements are carried out as satisfactorily as possible.

Furthermore, the magazines, the phonograph, the papers, the smoking facilities, including cigarettes, the tennis rackets, balls and shoes, the games, etc., which are all available for our boys when they come to Paris, are things which they greatly appreciate.

This brief sketch of some of the activities that we are undertaking over here may answer some of the questions as to what the Technology Club of Paris is for. I knew that there is not a Technology man in our whole organization who, if he could really see how much good will be done later by the Technology center over here, would not gladly take off his coat and work at least one week to help. Since this privilege is denied him, let him do the next best thing and "ante up," and do it mighty promptly and cheerfully.

NOTE—The Technology Club of Paris now has its headquarters with the American University Union in the Hotel Royal Palace, 8 Rue de Richelieu.

WHAT THE AMBULANCE UNIT IS DOING

A vivid letter from a 1917 graduate on his service at the front

For the benefit of the too large number of Alumni who are not yet getting their M. I. T. war news fresh in *The Tech* we reprint an interesting letter from a graduate of this year to Professor Pearson, telling of what he is doing with the Technology Ambulance Unit:

In Camp near L——, July 18, 1917.

My dear Professor Pearson:

As you remember I promised to send you a letter from France telling you a little something about what the Technology Unit is doing. To give you a definite account of all the interesting events since our landing at Bordeaux would require a lengthy perusal of my diary and that I have not time for. However, our sergeant has just reported to us that we are going to take a night drive from 1 o'clock this afternoon until 4 o'clock tomorrow morning and that we are to have from now until then to rest, but I am going to take a little of this valuable time to write to you.

Our arrival at Bordeaux is an event we shall remember all our lives. If you have ever been in Bordeaux you will know what a quaint little town it is with its crooked and narrow streets. It happened to be the Fourth of July when we landed and the French people knew it. There were American flags on the ships in the harbor and everyone waved them at us from little balconies and windows as we marched up from the dock to the square in front of the station. All of the people saluted or cheered our flag and traffic had to stop for the time being while the crowds collected on the sidewalks to see the "Teddies," as they called us, go by.

We were crowded into a troop train that night and the only ones who got any sleep were those who had the ingenuity to crawl up into the parcel racks. We were only in Paris two days and we were so busy and tired that we had little time for sightseeing. The night before we left, however, Mr. Lansingh had us all down to the Hotel Madison for the last good dinner we shall have for many days to come. He was also kind enough to come over the next morning at six o'clock and take a picture of us all starting fully equipped with our steel helmets, gas masks, guns, etc.

The camp where we are now is a quiet little spot surrounded by big shady trees and was once somebody's private estate. We are not in range of the guns here, but close enough to hear the booming most every morning.

We have been here almost two weeks and day after tomorrow, we are to pack and leave for —— where we will be stationed for active duty. It is located between —— and —— . We are connected with the Reserve Transport Section of the French army, and our duty is to carry ammunition and other supplies to wherever the fighting is the heaviest.

The French army considers this a more valuable or necessary adjunct to the service than the ambulance work. The machines are all Pierce Arrow, five-ton trucks and there are two men to a car.

Every day we leave the camp in runs of five cars each and set out in different directions, so we have been able to see a great deal. The Lafayette Escadrille is only a couple of kilometers away and it is very interesting to talk to the aviators and watch the machines leave to fly over the lines.

It would take too long to tell you about all the trips we have to take, but I shall describe yesterday's as a typical one. We left the camp at 1 p. m. and went to the well-known town of —— which is not far off. It is subjected to shell fire from the German big guns quite often and certain sections of it are battered to pieces. Whole blocks of houses have been torn away and houses which were once handsome residences have shell holes in them big enough to drive through.

As we left the town our drive continued to get more interesting. There were shell-torn houses, evacuated trenches, and barb wire wherever you looked. We took a winding road up a little hill and there we saw bomb proofs and dugouts all along the road. Finally we came to the famous battle field of the —— . Not long ago it was the scene of hot fighting, but of course now it is nothing but one of desolation. Over the flat field, as far as could be seen, there was nothing above the ground except the posts for the barb wire and here and there rusty pieces of broken machinery.

Where the French trenches ended and the German began could hardly be discerned, because they ran so close together. Little wooden crosses marked the graves of both the French and German soldiers.

We continued down into a little valley where once stood the little

village of ———. Not a house remained standing. Now it is as ruined as Pompeii. As we turned to come back we stopped for a half hour to go down into some old German dugouts. There were little entrances to ground everywhere. Some of them were shallow and in others it was necessary to climb down a ladder about thirty feet under the ground.

When the Germans were there they were all lighted by electricity, but we had to use our pocket flash lights. We had to be mighty careful what we picked up and stepped on for fear of unexploded bombs. It seemed something like the catacombs only instead there were little bedrooms, dining rooms, kitchens, hallways and stairways.

Some were much more elaborate than others and a few employed concrete. In one dugout which was very deep the walls were painted with German eagles and different coats of arms. Everybody was collecting souvenirs and had their pockets filled with cartridges and even fuses which they could use for fire crackers. I wanted a German button so picked up a coat to cut one off and uncovered a little wooden cross with a German inscription on it.

Looking in the direction of the present battle line we could see several observation balloons and of course aeroplanes. We returned to camp about half past nine in the evening.

We are getting all the exercise and work we want and we have to go through a French drill and manual of arms. Everyone in our unit except a couple have had their heads clipped because it is cleaner and our steel helmets are pretty warm for summer wear.

I got paid our five cents a day yesterday and our ration of French tobacco. It was hard to get used to this war food, in fact I don't think I ever shall. Butter, eggs, milk and sugar are unknown commodities.

The fourteenth of July was a French holiday and they gave us boiled beef instead of horse meat and champagne instead of the usual red wine.

I hope I haven't made this long letter tiresome to read, for if I have I apologize to you and the censor.

Sincerely yours,

(Signed) DON TARPLEY, '17.

PRESIDENT MACLAURIN'S GARDEN

An ingenious and delightful piece of landscape gardening by
an alumna

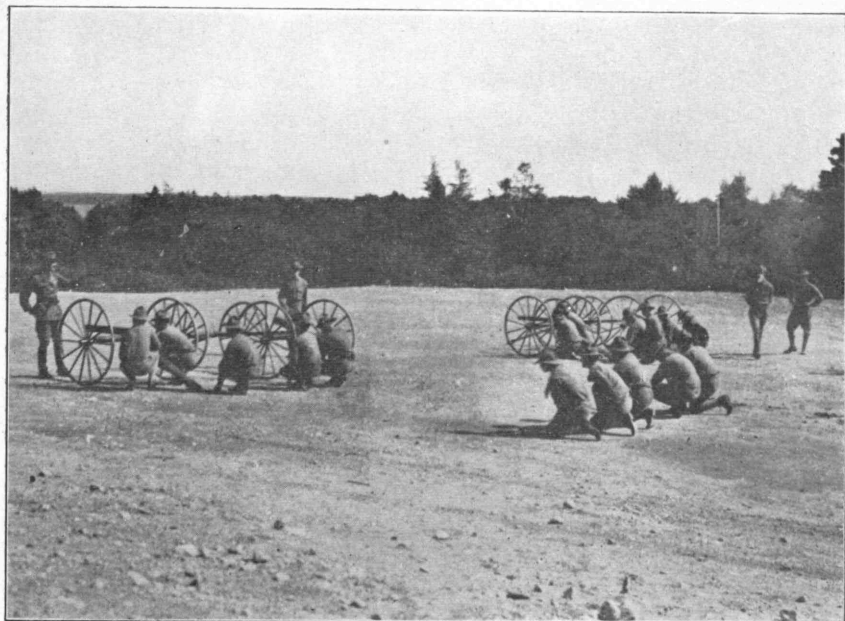
The garden behind the president's house, recently completed, has given the final touches of beauty to the interesting group of which it is a part. Every once in a while there is the question raised as to how it comes that the president of a college can find himself comfortably installed in a house which is in such close proximity to a students' dormitory, but to those who realize how closely Mrs. Maclaurin has woven herself into those quiet movements which tend to make the students at home, and how the president's door has always been open to the student, if he were not otherwise engaged, the question answers itself. And in this light, the delightful house nestling in the angle of the big dormitories is most properly placed. It is in this proximity that Miss Mabel Keyes Babcock, '08, who is the landscape architect of the garden, has found some of her most puzzling problems. Upon this little area of trees and flowers and greensward look out the windows of the angled dormitory as well as those of the president's home and of the larger suites in it to be devoted to public occasions of the Institute; it belongs to all three of the groups, and yet there is the necessary privacy of the home which cannot be disregarded. Thus it is that a screen of tall cedars interspersed with deciduous trees in one place and in another the unique device of lindens trained to trellis life will mask the beauty spot of flowers and yet not obscure it.

The level of the garden is somewhat below the living floor of the house, but that again is a short flight of steps above street level, so that the garden really lies some four feet above street level, being bounded by a wall which again rises nearly as much above the garden plots. The garden wall is to be one of the features of the place, for everywhere vines are trained which in another season will hide the coping with masses of verdure and brilliant groupings of colors. This will be modified here and there, where the tops of the more formal evergreens project their dignified lines above the level line and the taller trees give hints of the beauty that they sentinel.

The main axis of the house, running nearly north, points directly to a garden niche, a gem in sandstone from the office of Mr. Bosworth who, throughout these great Technology structures, has maintained a harmony of design at once pleasing and striking. Here are ivies already trained, which in another season will relieve the severity of the stonework, and perhaps in the future the finishing touch of a group in marble may come from some generous class or friend to touch perfection in design. Slim and stately cedars flank the stone creation and here make the principal mask of the garden from the dormitories. Massed evergreens fill the corners of the garden and between them the scattering of the deciduous trees, willows for their early, fresh spring greens, horse chestnuts with their candles and below them a host of other delightful things.

At the eastern border of the garden is placed the tea house, whose panels will be brilliant climbing roses and whose roofing will be the wistaria. The little walk that leads to it is guarded by magnificent Virginia boxes, centuries old, while on either hand are well conceived groupings of shrubs and flowering plants. The background everywhere is in evergreen. Hardy box is freely used, the heavier timber is in spruce, hemlocks and pines. At their roots in the northeast corner nestle the quiet flowers of the woods, lilies of the valley, iris, peonies, bleeding heart, with here and there the modest fern in the environment of dampness and filtered light that best suits its nature. Eastward and on the dormitory side will be the rose beds, where in the full sunlight scores of choice varieties will give brilliancy to the garden in the early summer days. This will be the brightest point in the color scheme which starting here with the distinctive tintings of the rose will be continued in gradations through the purples and blues to pale yellow, orange, and at the corresponding corner athwart the garden, will end in the bright reds. This planning is carried out in minor as well as major plants and shrubs.

One hundred varieties and more of choice or even rare plants are brought here from nurseries all over the East, to make the garden a gem. Quaint Chinese dwarf trees and the Chinese umbrella and juniper are in striking contrast of form yet in harmony of color with native American bushes. Japan is drawn upon for its picturesque little maples, which are in two varieties exhibiting their colorings as the seasons advance, the purple foliage of the one marking spring as does the bright red of the other the approach



ARTILLERY DRILL AT CAMP CUNNINGHAM



MAKING MARKSMEN AT CAMP CUNNINGHAM



A CLASS-ROOM DORMITORY AT THE INSTITUTE

of winter. Here are others from the Orient, ginkgos with their crenulated sectors of leaves, thread-leaved cypress, azaleas, the yew and other choice exotics. Flowering dogwood, flowering apples, whose blossoms come out before the leaves, rhododendrons and azaleas blazon their colors on a background of hardy greenery, with unusual things like the Douglas fir, the Mugho pine, Frazier fir, the latter rearing their heads in company with the cedars and deciduous trees. There is a little home corner with the old-fashioned blossoms, heather, forget-me-nots, violets, ladies' delight, phlox and thyme, and again bright poppies, the yellow geum and purple asters, blend in a congress of brilliant tints. And about it all flows a border of low and quiet life, fringing the walk about the sunken lawn, in the centre of which the striking feature is the even surfaces of the grass steps descending to its level.

Here and there are clawfoot stone seats, simply carved, which clustered about a little pool afford beautiful reflections of sky and earth, and at the western edge a more pretentious nook in curving benches of stone lies sheltered from observation and from northerly winds by its thick screen of Chinese junipers and the taller cone-bearers. The plantings care for the little plots between house and street walls with their wavy ramparts as street or house approach determines their lines. The approach to the house from the Riverway presents a border to the driveway of alpine rhododendron accentuated by Maxwellii, which will be restrained by cool stone lamp standards and garden vases, while the wall of the footways will be marked by taller growths of box. In the recessed corners of the front are clumps of purple beeches and Japanese maples.

The mechanical needs are cared for by many concealed water sprays, which add to the picturesqueness while effecting their needful purposes, while other essentials are present but not emphasized.

In the whole work Miss Babcock has endeavored to create clearness in a very close plan, which shall be dignified and at the same time simple, which shall be a winter garden without too much severity, which shall be subordinate to the beautiful house that has been placed here for Technology's president, and which shall interest and please three groups of people, the president's own family, the gatherings for which his house has been adapted and for which the garden will be a delightful reception hall, and the students whose dormitories are so close at hand.

JOHN RITCHIE, JR.

TECHNOLOGY COLORS

CHARLES S. GOODING, *Secretary of the Class of 1879*

On Tuesday, June 13, 1916, the classes went to Nantasket and '79 displayed a banner reading as follows: "'79 selected the Tech colors. This settles it." '77 also had a placard stating that the class of '77 suggested and originated the Institute colors which were accepted. '76 and '78 also claim to have originated the Tech colors.

In order to settle this matter your secretary thought it would be well to have a meeting of the secretaries of the different classes of '76, '77, '78 and '79, and he, therefore, on October 23, 1916, sent the following letter to Mr. Freeman, secretary of '76, Mr. Hale, secretary of '77, and Mr. Collier, secretary of '78:

There has been considerable discussion as to which class chose the colors for Tech. The members of the class of '79 are positive that they were the class that chose the colors, subject to the approval of '76, '77 and '78. The class of '79 is desirous of having the matter definitely proved and settled, if possible. We do not want credit for anything which does not belong to us, but we do want credit for what does belong to us.

Therefore, it seems desirable that a meeting should be arranged between the secretaries of '76, '77, '78 and '79. Will you let me know whether you can meet me at ten o'clock Wednesday morning, November 1, at my offices, 27 School Street, in order that we may discuss the matter and arrive at a satisfactory conclusion, if possible.

To this letter, on October 27, 1916, Mr. Freeman wrote me as follows:

October 27, 1916.

Dear Mr. Gooding:

I had always supposed that '76 chose the class colors and have a clear recollection of some member of the committee coming into the drafting room and telling what had been adopted, but I can't at this moment remember the constitution of the committee, and I doubt if our class records extend back so far. However, I will delve in such archives as I possess and will send a little circular note out to the surviving members of the class and see if any one has a clear and positive recollection. Probably I can discover who the members of the committee were.

It now appears impossible for me to be at your office at ten o'clock on Wednesday morning, November 1, and it will be obviously impossible for me to get replies to my circular letter before that time, so I hope there may be an adjourned meeting.

Very truly yours,

JOHN R. FREEMAN.

To this letter of Mr. Freeman I replied as follows October 28:

In reply to yours of the 27th inst. I note that you will send out a circular letter to the members of your class to get their best recollections in relation to the matter of the choice of the colors for Tech. This is what I did and I think it is what each secretary ought to do. Then we can get together and each one be prepared with all the material he can gather so that we may arrive at the real facts in the case and settle it once for all.

I also wrote to Mr. Collier and to Mr. Hale to the same effect. Mr. Hale replied on October 30, stating that he thought it would be a good idea for the secretaries to get together and compare notes and records. Meantime, I had received a telephone message from Mr. Collier's sister stating that Mr. Collier was on his way to South America and the meeting would have to be delayed.

On February 6, 1917, I received a letter from Mr. Hale stating that Mr. Freeman was in Japan and would not return until April or May. The matter of the meeting of the secretaries was, therefore, unavoidably postponed and I so notified Mr. Hale and Mr. Collier. On April 16 I received a letter from Mr. Hale calling my attention to an article in the *TECHNOLOGY REVIEW* for January, 1917, on the Institute colors for the class of '76 written by Mr. Freeman, the secretary of '76.

In view of this course of Mr. Freeman's in publishing the recollections of his class in the *TECHNOLOGY REVIEW*, without any notice to the secretaries of the other classes, it appeared to your secretary that the only course left open was for the secretaries of '77, '78 and '79 to do likewise, in order that the Association of Class Secretaries, with the exception of the secretaries of '76, '77, '78 and '79, might take the matter up and from the records thus submitted render a decision as to what class or classes were responsible for the selection of the Institute colors.

In order to obtain information from the class of '79 as to their recollections in relation to the selection of Tech colors, the secretary sent the following letter to the different members of the class of '79 on June 23, 1916:

Dear Classmate:

The question has arisen, which class selected Tech colors. The recollection of the different members at the class dinner is that '79 selected these colors; '77 claims that it selected the colors and '78 also claims the honor.

At the Tech Reunion exercises at Nantasket on June 13, '79 marched up company front, wheeled in front of the grand stand, gave the Tech and '79 cheer and carried a banner saying

"'79 selected the Tech colors. This settles it."

I want to back up this statement with all the facts that I can. Will you write to me and give me your best recollection of the facts in this case?

Yours very truly,

CHARLES S. GOODING,
Secretary, '79.

In reply to this letter many communications were received from different members of the class. Some of the members of the class had vague recollections of the matter. The secretary's recollection of the matter was that Alfred T. Waite had more to do with the selection of the colors than any other member of the class. He, therefore, communicated with Mrs. Alfred T. Waite, who replied as follows:

Dear Mr. Gooding:

It was with the greatest interest that I read your letter, for all during the Tech celebration the question of the colors was always with me. I said many many times that the honor was '79's—and it certainly was. Mr. Waite was so proud of it and told me repeatedly that *he* was the man whose selection, "cardinal red and silver gray" was chosen. He was very particular about the exact shades—red and gray would not do.

But I have no written proof. Only his word and his positiveness about it.

Haven't the class any records kept by the secretary of that year?

I was told at Tech (Rogers Building) by Mr. Humphreys or his assistant, that the *original* colors were in the safe.

I will do my best to help in proving it—for we know the honor belongs to '79.

Mrs. Waite sent me a letter from Mr. Humphreys, secretary of the Institute of Technology, written on March 15, 1905, which letter reads as follows:

BOSTON, March 15, 1905.

MR. ALFRED T. WAITE,
Assistant Managing Editor,
Boston Herald, Boston, Mass.

Dear Mr. Waite:

Last June you were good enough to give Mr. Monroe part of the ribbons which were samples of the ribbons chosen for the Institute in 1876. Mr. Monroe has let me have the ribbons and I have recently been able to match them. It happens to be one of my duties here to see that the ribbon is provided for the diplomas for each commencement day and this year I hope to have the original colors used. President Pritchett is much pleased to find that we know what the original colors were and is glad to have them used in place of those which have been used recently. Personally I believe the combination is much more beautiful than the less brilliant one used the last few years.

It would be very pleasant to have you write me, if you will, when the colors were

chosen and how. If you can send me such a note, I shall be glad to have it put on file together with the samples of the colors that we have, for permanent record.

Very truly yours,

WALTER HUMPHREYS,
Registrar.

Thereupon the secretary wrote the following letter to Mr. Humphreys on October 10, 1916:

Dear Mr. Humphreys:

Some question having arisen as to which class chose the Tech colors, I am writing as secretary of the class of '79 to ask you to give me any information which you may have along this line. I have a great many letters tending to prove that '79 is the class which chose the colors.

Mrs. A. T. Waite of Riverbank Court tells me that you have information in regard to this matter and I have before me a letter written by you on March 15, 1905, to Mr. Waite in which you state as follows:

"It would be very pleasant to have you write me, if you will, when the colors were chosen and how. If you can send me such a note, I shall be glad to have it put on file together with the samples of the colors that we have, for permanent record."

Did you ever receive such a letter from Mr. Waite? It is my intention to call a meeting of the secretaries of the classes of '77, '78 and '79 to have this matter settled up and any information which you can give me will be appreciated.

In reply I received a letter from Mr. Humphreys on October 19, 1916, which reads as follows:

Dear Mr. Gooding:

In reply to your note of October 10 concerning the choice of Technology colors, I am very pleased to send you herewith a copy of the letter, which I did receive from Mr. Alfred S. Waite.

I have kept it in our strong box, together with the colors, which came with this letter. These colors I was fortunate enough to be able to match with a large supply, which have been good enough to keep as samples, and in that way we have the original colors undisturbed, to be referred to only when necessary.

Very truly yours,

WALTER HUMPHREYS,
Registrar.

The letter from Mr. Waite to Mr. Humphreys follows:

BOSTON, March 17, 1905.

MR. WALTER HUMPHREYS,
Massachusetts Institute of Technology,
Boston, Mass.

Dear Mr. Humphreys:

Replying to your letter of March 15, I have to state that it gives me much pleasure to forward all the information concerning the Institute colors that I possess.

At a meeting of the class of '79 early in 1876, the question of a college color came

up and a committee, of which I was chairman, was appointed to consider the matter. All the single colors having been adopted by other colleges, the committee turned to combinations of shades. Each member submitted one or more and these were passed upon by the whole committee. These combinations, I well remember, provoked much merriment. One member, who was a Kentuckian, was strongly in favor of bronze and this was voted down after another member facetiously objected on the ground that it was the color of Kentucky's principal product. Other offerings, such as purple and green, blue and green, purple and yellow and other inharmonious combinations were eliminated and finally the chairman's combination of cardinal red and silver gray was selected. The class voted to accept the committee's choice and to ask the other classes to adopt cardinal and silver gray as the Institute colors, and although this was a move on the part of the first-year men, the upper classes acquiesced. The colors were first used at the prize drill in May, 1876, when the battalion guidons were made of red and gray silk, and later for hat bands when the students visited the Centennial Exposition at Philadelphia.

The samples which you enclosed are the exact shades which were first chosen, the red being a bright shade and sold as "cardinal red," a popular color at that time.

Very truly yours,

ALFRED T. WAITE.

The foregoing letter from Mr. Waite to Mr. Humphreys, written March 17, 1905, is a very clear statement of the case and is a statement of the facts as the secretary remembers them. Further substantiating the letter of Mr. Waite is a letter from Arthur M. Waitt, written July 7, 1916, in reply to my letter of June 23, 1916. Mr. Arthur M. Waitt is a man who is very clear in his recollections as the following letter shows:

My dear Gooding:

In answer to your inquiry of June 23, my recollection regarding the selection of the present Tech colors is as follows:

In the early part of 1876, a meeting of the class of '79 was called and held in the room at Tech where we were accustomed to have our lectures before Professor Kneeland and Professor Atkinson on the main floor of the Rogers Building. At this time it was stated to the class that the Tech colors were at that time lavender and that this color was found unsatisfactory, and had really never been made use of on any occasion. As a result of the discussion it was thought desirable that Tech should be dignified by some more satisfactory color and a committee was appointed to take the matter up and to report back at a later meeting. I do not remember who the committee were except that Phil Little was one of the members. Later on the committee reported in favor of cardinal red and silver gray, and, if I remember correctly, the exact shade of cardinal red and of silver gray were shown accompanying the report.

If I remember correctly, the question of adopting these colors was put to a vote and they were unanimously adopted as the sentiment of the class of '79. It was thought only proper before going ahead that the action of our class should be submitted to other classes then at Tech with the hope that they would agree with us and it might be a unanimous adoption. The result of the conference was that the

class were advised that the new colors were agreeable to all and a committee was appointed to have cardinal red and silver gray hat bands made, and also straw hats of a uniform style. We each ordered a hat and hat band, to be worn by the class of '79 when they went on an official visit to the Philadelphia Exposition, June 1876, and on that occasion the newly adopted Tech colors were first publicly shown and used, and I think no other class can, for a moment, have any claim to having been the first to adopt and make use of the new colors publicly.

From the time that I took my degree at Tech until the present time, I have often made the statement that the class of '79 was the first one to make an advanced move toward participation in various features that are now considered an essential element in college life. We were the first ones at Tech to adopt and use publicly the present Tech colors and we were also the first class to have public graduation exercises and the receiving of our degrees.

Following the break made by the class of '79, many athletic and college fraternities were organized.

I think there are other fellows in our class who are still living who have a clear remembrance of the action taken by us in 1876 regarding the adoption and use of cardinal red and silver gray.

Very truly yours,

ARTHUR M. WAITT.

Allan V. Garratt writes as follows:

My dear Gooding:

Answering your letter of June 23, I will say as follows:

Let us look at this thing logically.

I distinctly remember that, at the first class meeting of '79, at which time we organized and elected a class president, and a class secretary, and for all I know some other officers, the question of class colors came up and that subject was referred to a committee to report at the next meeting, which next meeting was held very shortly.

Now the logic of the thing is this.

If class colors had already been selected and adopted by the Institute why should we at our class meeting be discussing the matter and trying to select class colors. It is absurd.

There were no class colors adopted by the undergraduate body of the Institute at the time when the class of '79 held its first meeting.

I remember distinctly being present at the first meeting of the class,—that is at which the class organized and elected officers,—and also at the adjourned meeting at which it was formally decided that the colors of the Institute of Technology should be silver grey and cardinal red. The matter fixed itself upon my mind as I was strongly opposed to having two colors, and I urged the adoption of one color, in which I was voted down by my classmates.

Professor Pickering writes:

Dear Gooding:

Yours of June 23 to hand. The question of who selected the colors should certainly be definitely settled and decided by an unprejudiced committee. It should be done while as many as possible of those concerned are still living. It is regret-

table that three of the most important witnesses have already died. I refer to Waite, Howe, and Towne, '78.

I had little to do with it myself but, according to my recollection, at a class meeting called for that purpose A. T. Waite got up and proposed that Technology should have some colors. He and Howe were appointed a committee to select them and to consult with the three older classes, who later approved the plan. These colors were finally adopted.

I recall that the last time I ever saw Waite he told me personally that he went around to various shops and secured samples of ribbons and that later they were shown to Towne who approved of what they had selected.

In the final selection the opinions of '77 and '78 were certainly asked and probably had considerable weight. All that we can properly claim I think is (a) that the original idea of having colors was due to '79, probably Waite and (b) that he took the initiative and procured the samples, which were shown to and discussed by representatives of the other classes, as well as our committee.

I am very glad that '79 has a secretary who is taking the matter up.

The selection of the colors, or rather the proposal to have them, is the one notable thing that '79 did, and the class should certainly have the unquestioned credit for it.

Sincerely yours,

W. H. PICKERING.

G. M. Nichols writes as follows:

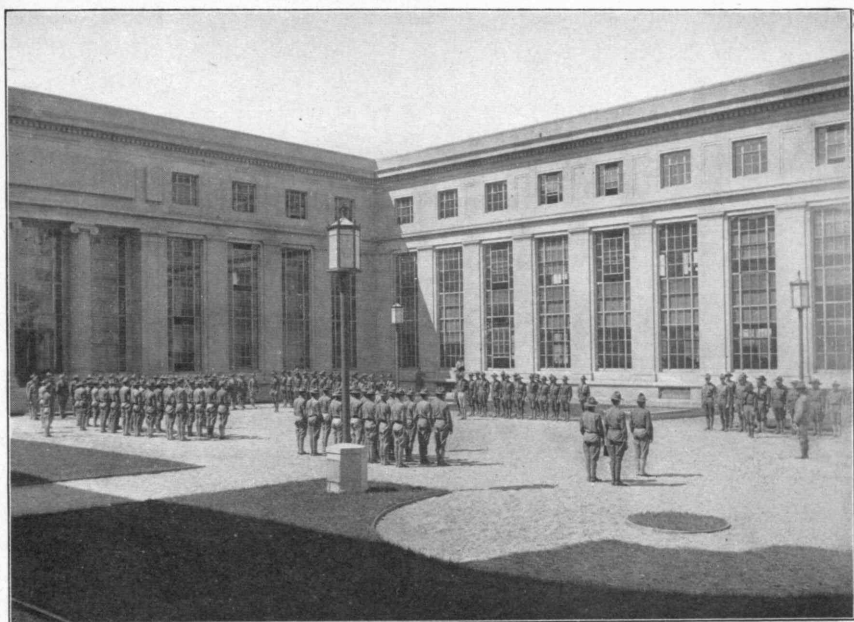
Answering yours in regard to Tech colors—It is my clear recollection that our class made the selection after considerable debate in full class meeting and by vote of the class.

A letter from Phil Little states:

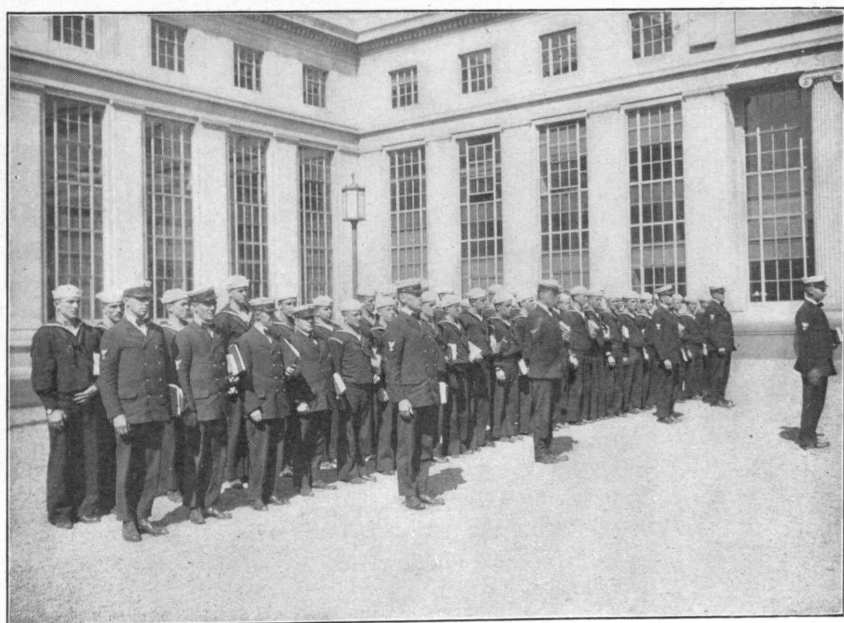
My recollection is that Waite, the one who is now dead, was with me on a committee, a joint committee, and I know I painted the colors on a piece of paper.

From the foregoing testimony it appears that the class of '79 held a meeting early in 1876, at which a committee was appointed to consider the matter of a college color for Technology. Each member of the committee submitted one or more combinations and these were passed upon by the whole committee. Finally the combination submitted by the chairman, Alfred T. Waite, of cardinal red and silver gray, was selected. The class as a whole voted to accept the committee's choice and ask the other classes to adopt cardinal red and silver gray as the Institute colors. In this the upper classes acquiesced.

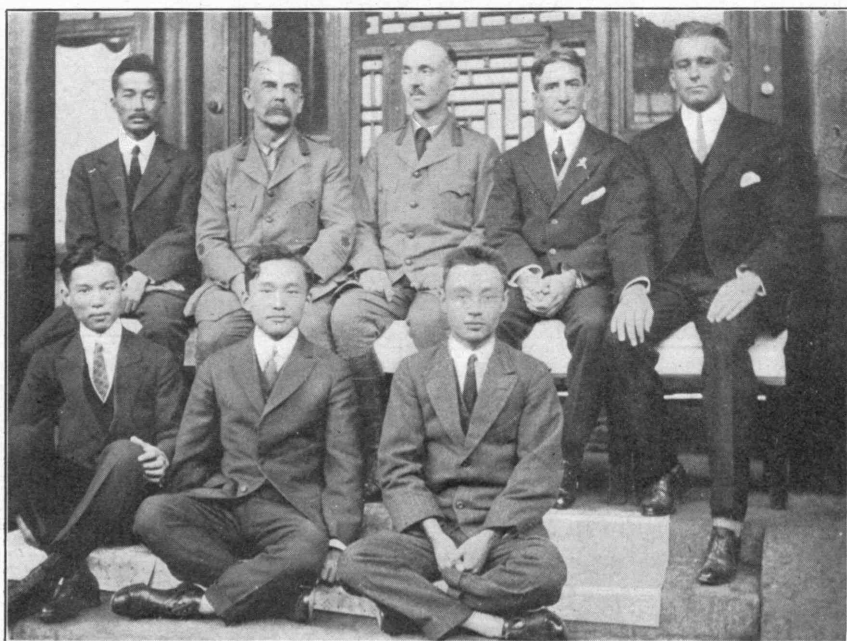
If '79 was not responsible for the choosing of the colors, how does it happen that Waite was the one who had the original samples of the ribbons chosen for the Institute in 1876 in his possession and was the one from whom the registrar, Walter Humphreys, could obtain such samples?



THE MILITARY AVIATORS IN DUPONT COURT



THE NAVAL ENSIGNS IN LOWELL COURT



THE NEWEST TECHNOLOGY CLUB

Started this Summer in Pekin, China. George C. Whipple, '89, in centre

TECHNOLOGY'S STATE GRANT IN DANGER

Massachusetts Constitutional Convention votes to end it

The November state election in Massachusetts will decide the question, so bitterly fought over during this summer's sessions of the convention for amending the state constitution, as to whether any educational or philanthropic institutions not under direct state control shall receive grants of aid from the state treasury. The amendment affects particularly the Institute with its annual grant of a hundred thousand dollars from the state, Worcester Polytechnic with fifty thousand, and the textile schools at Fall River and Lowell.

The amendment, known generally as the anti-sectarian bill, was framed originally, apparently, to settle forever the question of sectarian schools and private philanthropies, such as the Perkins School for the Blind, being given help from the state treasury. The question naturally extended itself to that aspect which most interests Technology alumni.

The well-known Mr. Lomasney of Boston led the fight for the amendment and opposed all attempts to exempt Technology and Worcester Polytechnic from the action of the bill. The Institute's principal defenders were C. G. Washburn, A. E. Pillsbury, and Lincoln Bryant, none of whom are Tech men. Their chief contention was that a great deal of the money recently pledged to the Institute was given on the understanding that state aid would be forthcoming for several years more, and that the grants of the legislature constituted a moral obligation even if no legal contract existed, as admittedly none does. The opposition made its stand on the ground that there exists no legal obligation and therefore no special favors should be shown lest it imperil the whole bill, the main purpose of which both sides agreed to be admirable and necessary. The whole issue of "moral" *vs.* "legal" was thrashed over from so many angles as to be thoroughly befogged, and it was suggested that it might be necessary to have a decision from the United States Supreme Court to settle it finally.

The result was finally that all amendments regarded as unfriendly to the health of the measure were thoroughly killed and the amendment was passed by a vote of 275 to 25. But the people of

Massachusetts at the coming November election will have the final say as to whether the amendment will be incorporated in the state constitution, and at present the issue is greatly in doubt. The rumor is, at this writing, that the amendment will be defeated, not by the friends of Technology, but by the Catholic vote, since that church feels that the measure is drawn principally to defeat forever its chances of receiving state aid for its parochial schools.

In the section of Miscellaneous Clippings in this number the interested reader may find several of the editorials from Boston newspapers discussing the question from both points of view.

As we go to press, November 7, yesterday's election seems to prove that the last-minute opposition to the amendment was very nearly impotent. The state majority against state aid was over 75,000. Only three cities voted against it. Technology has lost its state aid.

The Walker Memorial Sunday Pow-wows

Plans are well under way to arrange a series of entertainments at the Walker Memorial for undergraduates and alumni. A talk by a prominent speaker will open each entertainment, and will be followed by music and refreshments. Although the names of several men of national repute have been mentioned as possible speakers, no definite dates have been arranged.

The purpose of these gatherings is to stimulate interest in the Walker Memorial and to bring the student body not only into closer contact with one another, but also to keep them in touch with the alumni. Under the present extraordinary conditions, some difficulty has been experienced in securing the Walker Memorial. This fact makes it probable that the entertainments will be held every second Sunday instead of every Sunday as was originally planned. Speakers have also been hard to secure, but this difficulty has been satisfactorily adjusted by arrangements with choral and musical societies in this vicinity. On those Sundays when speakers are not available, a good musical program will be arranged.

THE MCKAY WILL AGAIN

The Validity of the transfer before the Massachusetts Supreme Court

Arguments relative to the validity of an agreement to transfer from Harvard College to the Massachusetts Institute of Technology the income of a trust fund, and eventually the principal, created by the late Gordon McKay for the establishment, in connection with Harvard University, of a separate school for instruction in the industrial arts and sciences, were made early in October before the full bench of the Supreme Judicial Court.

The full court is to determine whether Harvard can lawfully carry out the proposed transfer so far as respects the property received by it under deeds of trust and the will of Gordon McKay, late shoe machinery manufacturer.

The trustees of the McKay estate have already paid to Harvard \$2,247,262. The amount paid over in 1916 was \$198,573.24. The annual payments will increase from time to time as annuities fall in. It is estimated that in 1965, when the last annuitant will die, Harvard will receive a fund of \$30,000,000.

Harvard's reason for wanting the transfer is because it cannot properly carry out the desires of Mr. McKay. It feels that Technology is better equipped for the purpose.

The trustees, Frank F. Stanley of Swampscott and George E. Gilbert of Newton, have no objections to the transfer, but they question its validity.

Charles F. Choate, Jr., and Fred T. Field argued for Harvard College, while John G. Milburn appeared for Technology and the trustees under the will of Mr. McKay.

The point at issue is the interpretation of the desires of Mr. McKay in disposing of his fortune for the benefit of his fellow men, and whether Harvard, in entering into the agreement with the Institute of Technology, is properly carrying out those intentions. Mr. Choate painted Mr. McKay a hard-headed and successful business man, inventor of machinery for making shoes, interested in mines and essentially practical. Mr. McKay picked out Harvard as the safest place to deposit his huge fortune and as the place

likely to administer it with the greatest efficiency and the best results.

Mr. Milburn, on the other hand, drew a quite different picture of the man. He showed him living within the shade of Harvard yard, subject to its many cultural influences, a lover of art, music and the broadening influences of travel, and above all an admirer of the university environment. And that university environment, according to Mr. Milburn, was what Gordon McKay wished associated with the employment of his money; he had no idea of giving it to the Institute of Technology.

Mr. Choate argued that, under the agreement, it cannot be said the university merely contributes to the support of an institute school. It acquires rights in institute property which make the school for Harvard purposes and Harvard students, the Harvard school of applied science. The question, he said, narrows down to this: "Has Harvard, in entering into the agreement, undertaken to apply the income of the Gordon McKay Endowment to educational uses through the medium of the joint school in a way consistent with the needs and will of Gordon McKay? We submit that Harvard has the same broad power with reference to the use of such income in the promotion of applied science that she has with respect to her general funds. If these propositions be true, the conclusion is inevitable that the President and Fellows have authority to carry out the agreement so far as it applies to the trust fund created by Gordon McKay. But it is not essential that the President and Fellows have as great power over the Gordon McKay Endowment as they have over their general funds, in order to sustain the agreement. On any construction of the deeds and will, the control retained by Harvard under the agreement is ample, as appears from preceding analysis of the agreement."

Mr. Milburn for Technology and the trustees, said: "Gordon McKay evidently preferred the aegis of the university for his trust, a university environment for the work with its liberalizing influences, to the professional spirit of a technical institution, and the steady, gradual evolution of Harvard as a centre of instruction and research in applied science and engineering in association with all its other departments, to a mere increase in the size, facilities and equipment of any existing technical institution or in the size of its student body.

THE CORPORATION THANKS PROFESSOR CROSS

At the October meeting of the Corporation it was unanimously voted that the following resolution, brought in by a committee consisting of Mr. Munroe, Mr. Carson and Dr. Mixer be spread on the records.

In accepting the resignation of Professor Charles R. Cross after forty-seven years of continuous service on the teaching staff of the Institute, the Corporation desires to place upon record its high appreciation of his value as a teacher, of his effectiveness as an educational pioneer, and of his steadfast devotion to the highest standards in the pursuit of pure and applied science.

Graduated in the class of 1870, Professor Cross became immediately associated with the department of physics and was intimately concerned in the development of the physical laboratory, then an almost untried means for teaching the principles of science to undergraduate classes. In addition, and for nearly half a century, he lectured on general physics to succeeding classes, thus coming in contact with practically every student at the Institute. His lectures were markedly luminous and his use of experiments in demonstration unusually effective.

Entering the domain of physics at the beginning of a period of extraordinary growth in applied science, Professor Cross was a potent factor in the development of such epoch-making devices as the telephone, and is a high authority upon the application of physics to the needs of modern industry and life. It was largely through his foresight and zeal that, as early as 1882, the Institute established a degree-giving course in electrical engineering.

Active and zealous in matters of administration as well as in the work of teaching, Professor Cross has been of high service not only to the School of Industrial Science, but also to the Society of Arts and the Alumni Association. Throughout the early, difficult days of the Institute, when its very existence was problematical, not only did he gladly accept his full measure of sacrifice in maintaining its organization, but also, by his learning and by his authority in the field of applied science, he did much to make both the educational world and the general public appreciate the far-reaching significance and value of the principles and methods of

teaching for which the Massachusetts Institute of Technology stood.

Retiring in full vigor of mind, Professor Cross will doubtless, by new contributions to science, reflect additional credit upon the Institute of Technology, which is already so fortunate in having had him both as a graduate and as a leader, during many crucial years, of its educational policies.

Robert Swayne Peabody

The death of Robert Swayne Peabody on the twenty-third of September, 1917, removes one of the most distinguished figures in the architectural profession. Born in 1845 he was one of the early group of American students at the *École des Beaux Arts* in 1868, and began the practice of architecture in Boston in 1870. He was a Fellow of the American Institute of Architects, a member of the National Institute of Arts and Letters, and an Associate of the National Academy. He was in addition a past President both of the American Institute of Architects and of the Boston Society of Architects, a former Chairman of the Boston Park Commission, and an Overseer of Harvard.

At the time when architecture was achieving its Renaissance in America he set his distinguished mark on much of the work in and around Boston. Broad in his sympathies, versatile in his artistic expression, he was even more a great influence in architecture through his enthusiastic and stimulating personality. Although seventy-two years of age at the time of his death, he never became an old man in any particular, preserving until the last his vital enthusiasm, his jovial and sympathetic disposition, and a boyishness that was infectious.

It would be difficult to estimate too highly the beneficent influence he exerted in the affairs of the American Institute of Architects and in the field of architectural education. Few men have achieved a wider circle of friendship and few have left a greater sense of personal loss amongst those who are privileged to know him. His memory will always be a stimulus to those who follow in his profession.

RALPH ADAMS CRAM.

JAMES MASON CRAFTS, LL.D.

The Review is glad to be able to print below a more complete and adequate memorial of former President Crafts than was possible to secure during the summer. The memorial was written for the Journal of the American Chemical Society by Henry P. Talbot, '85, Professor of Chemistry at the Institute and therefore, as a younger colleague of Professor Crafts, unusually fitted to write an exact account of his life-work.

In the death of Professor James Mason Crafts the chemical profession of America has lost one of its few remaining members who served to link the present generation, through his personal contact and friendship, with those master-builders in chemical science, Bunsen and Wurtz.

Professor Crafts was born in Boston, March 8, 1839. He was the son of R. A. Crafts, a merchant of the city and a pioneer in the manufacture of woolen fabrics in New England, and Marianne Mason Crafts, the daughter of Jeremiah Mason, at one time United States Senator from New Hampshire, and a lawyer of great eminence. His boyhood was spent amid peculiarly delightful social and intellectual surroundings. There was in Boston, in 1855, something of the active interest in science, especially in its more popular forms, which characterized the days of Faraday's lectures at the Royal Institution in London, and the boy Crafts found his budding interest in science much stimulated by the lectures of Agassiz, Cooke and Rogers, and this was further enhanced by his friendly personal contact with William Barton Rogers in the boy's own home, where he had fitted up a laboratory in which he repeated the experiments of the lecture room and carried on others described in Hare's Chemistry. The Lawrence Scientific School had been recently founded, and Crafts abandoned an original intention of taking a collegiate course, to enter that school, completing the course in 1858, for which the degree of Bachelor of Science was awarded.

The profession of mining engineering was then one of great promise, and an additional year of engineering studies at Cambridge followed. In 1859 he went to Freiburg, Saxony, to pursue further the study of mineralogy and mining engineering, and was

one of the first Americans to attend that celebrated school of mines. His experience at Freiburg developed an increasing interest in chemical science, and a year later he transferred his residence to Heidelberg and came at once under the influence and instruction of Bunsen, entering later into a close relation with that great teacher. Bunsen and Kirchhoff had just begun their researches in spectroscopy. Caesium had been discovered, but the discovery of rubidium followed while Crafts was Bunsen's assistant, and together they demonstrated the presence of caesium in the waters of Nauheim.

Attracted by the fame of Wurtz, Crafts removed to Paris in 1861, where Wurtz was the successor of Dumas, and enrolled himself at the *École de Médecine*, remaining there for four years, during which he derived much inspiration for the work of his later years. He returned to America in 1865, and after a year or more spent in the examination of mines in Mexico and travels in California, he became, on the founding of Cornell University, the dean of the chemical faculty of that institution. He there developed the laboratory method of instruction to a degree not previously known.

In 1870 Professor Crafts succeeded Professor Storer in the chair of general chemistry at the Massachusetts Institute of Technology, and devoted himself to the building up of that department until 1874, when he was obliged to relinquish his work and go abroad on account of ill-health; retaining, however, a non-resident professorship until 1880. The years from 1874 to 1891 were spent chiefly in Paris at the *École des Mines*, and during this period he carried out alone, or in collaboration with Professor Friedel, a valuable series of investigations on the ethers of silicon, and other compounds of silicon and organic radicals, and during that time there was published the work upon the well-known Friedel and Crafts reaction involving the use of aluminium chloride, which proved to be one of the most fruitful of synthetic organic procedures. He also carried on investigations on the density of the halogens at high temperatures.

It was not, however, to chemical science only that Professor Crafts made important contributions. His investigations in thermometry were of such painstaking accuracy and thoroughness that they have remained classics, and the data obtained by him have withstood the test of time and modern refinements in research. The value of his work has been attested by distinguished recogni-

tion on two occasions. The first was in 1885, when he was awarded the Jecker Prize of two thousand francs by the Paris Academy of Sciences, and was made a Chevalier of the Legion of Honor by the French Government, and again in 1911, when he was awarded the Rumford Medal by the American Academy of Arts and Sciences, of which he had been a Fellow for many years.

Professor Crafts returned to Boston in 1891, and resumed a close connection with the Massachusetts Institute of Technology, taking charge of the instruction in organic chemistry in 1893, and later of the department of chemistry. Soon after his return to Boston he was elected a member of the Corporation of the Institute. On the death of President Walker he was elected Chairman of the Faculty and a few months later President of the Institute. He received the degree of Doctor of Laws from Harvard in June, 1898. Finding the duties of the presidency less congenial than the pursuit of science, and the demands of the office too great a tax upon his strength, he resigned the presidency in 1900, but retained a research laboratory at the Institute, until his lessened vigor no longer permitted even this activity. During this time he made further contributions to thermometry, and to the study of catalysis in solutions. He was a member of the National Academy of Science, the American Chemical Society, and other societies in America, and also a corresponding member of the British Association for the Advancement of Science, and an honorary member of the Royal Institution of Great Britain. He died at his summer home at Ridgefield, Conn., on June 20, 1917.

Although his scientific activities were frequently, and in his later years almost continuously, impaired by ill-health, Professor Crafts has left a marked heritage to chemical and physical science, and to the development of instructional methods in those sciences, and his services rendered to the Institute at several different periods in its history, notably as its President, were made at much personal sacrifice. He was modest in the extreme, and somewhat reserved even among his colleagues, but their memory of their association with him will always be that of a cultured scholar, a man true to his ideals of the man of science and a generous friend to all in need.

H. P. TALBOT, '85.

THE NEW COÖPERATIVE COURSES

The General Electric Company to take advantage of the Institute's training

It has been the constant endeavor of President Maclaurin to bring the school into the closest touch with the industrial world. More and more in the different departments there have been selected lines of work which shall introduce experience and actual practice of the professions taught, and this has been accomplished by relationships with commercial enterprises which permit study and investigation in large manufacturing establishments. The latest of these coöperative enterprises, to be known as Course VIA, is that which has been undertaken jointly by the Institute and the General Electric Company. This is a proposition which on the side of the students gives to them the advantages that an enormous industrial plant with its methods and problems will afford and at the same time the General Electric will reap the benefit of the services of a group of selected young men with the broad educational foundation that Technology insists upon and the special training that the Lynn shops are well fitted to give. These students will find themselves placed instantly on the completion of their school work, while the company will have at its disposal for its own business the services of men technically trained whose thoughts and energies have for a number of years been focussed on the processes and problems peculiar to the manufacture of electrical devices.

The coöperation is different in its nature from the other ones that the Institute has entered into. The chemical experience courses which have been pursued the past year in five great manufacturing centres, each one fundamentally different in the principles of its work from the others, give to the students in chemistry an actual knowledge of numerous processes, making of them well-rounded industrial chemists. The corporations receive the benefit of different groups of keen young minds looking sharply into their different processes. The coöperation with the U. S. Smelting, Refining and Mining Co. gives to the corporation the advantages of the coördinated research that the vast laboratories of Tech-

nology afford, and to the Institute the opportunity to manage its laboratories on a more efficient basis through employing them through a greater percentage of the time.

The new course in electrical engineering lies in a somewhat different line from the others. Its object is the training of leaders for engineering and administrative branches of electrical and related industries. The course affords a distinctive training for technical and executive responsibilities with manufacturing corporations, and particularly electrical ones. The course covers a period of three years of coöperative engineering and administrative training, and the requirements for entrance into the course are the completion of work equivalent to the first two years of the Electrical Engineering Course at the Institute. College students who take their Bachelor's degree in Arts or Science by specializing in mathematics and physics are also admitted.

The three years of the coöperative instruction are equally divided between courses under the faculty at the Institute in Cambridge and employment under special foremen instructors at the Lynn works of the General Electric Company. In order to secure continuity of work at both institutions, each group of students is divided into two sections, one being at the Institute while the other is at the Lynn works, and *vice versa*. These two groups of students alternate in periods of approximately four months' duration, this period having been selected so as to enable coöperative students to take courses at the Institute in the regular terms of the Institute and with the established classes of the Electrical Engineering Course. These students receive much special advanced instruction at the Institute.

While working in Lynn the coöperative students receive compensation as regular employees. The first two of the three years of coöperative work include instruction at Technology which is substantially similar to the junior and senior years of the Electrical Engineering Course at the Institute, and also important experience in machine work, insulating, drafting, designing, testing and administration at the works. The last year of the coöperative course is given up to special research problems at the works and advanced instruction in the courses leading to a Masters' degree at the Institute; and after the course is completed, the students who have successfully completed it are to receive the graduate degree of Master of Science.

The number of men who may be admitted to this coöperative training each year is at the present time limited, and candidates for admission are subject to the approval of both the Institute and the General Electric Company. The group for this year was started in June on an experimental basis and is proceeding with marked success.

This course is highly regarded by various leaders of industrial affairs who believe that it is an advanced step in the direction of better training of engineers for executive and administrative duties such as now are making great demand on the engineering profession. The significance of starting an important educational move like this in war times will be appreciated by all who understand the tremendous need which the war is creating for engineers trained in the executive work of production, a need which will be even more emphatic during the world's reconstruction period following the war. The improvement of educational processes during war times is supported by important precedents, as for instance the passage of the great Morrill land grant bill by Congress during our Civil War, out of which have grown* the nation's state universities. This present coöperative course will make a very important place for itself in American industrial development, and its extension and broadening depend only on financial support with which the Institute may be able to care for its development.

ALUMNI MAKING THE WORLD HEALTHIER

The appointment of Burt L. Rickards, M. I. T. '99, to the post of assistant deputy commissioner of the State Board of Health of New York suggests that during the summer there has been quite a moving of Tech sanitarians to higher places. Mr. Rickards, who was nine or ten years ago head of the bacteriological laboratory of the Boston Board of Health, has been since that time in commercial bacteriology in Urbana and in Boston, and goes now to a most important place in one of the strongest health organizations in the country. It is important to note that the position was one in the civil service, and that Mr. Rickards headed a long list of competitors.

Professor S. M. Gunn, '05, of the Faculty of the Institute has gone to France recently, where he is associated with Livingston Farrand and Professor Severance Burrage, '92, in tuberculosis work among the civil population. He is associate director of the American Anti-Tuberculosis Commission of the International Health Board, with an office on the Rue de Rivoli, Paris.

Two of the Tech alumni have gone, within the past month, from New England to the west coast where they are in charge of two of the great districts into which California is divided for health administration. These are E. E. Ingham, '14, and R. N. Hoyt, '09. Mr. Ingham has been instructor at the Institute and was the pivot about which the recent important Massachusetts state health war conference revolved, while Mr. Hoyt was first health officer in one of the Oranges in New Jersey, coming thence to the coöperative health administration of Wellesley and adjoining towns, a position which he resigned to become health officer of Manchester, N. H. Hoyt is to have the central district of California, including San Francisco, while Ingham will have headquarters probably at Riverside.

Professor George C. Whipple, '89, and Professor Charles E.-A. Winslow, '98, the latter now at Yale, are returning from the sanitary mission to Russia, and the former will take up again his classes at Tech about November 1.

C. E. Turner, instructor in Biology and Public Health, associate of the Sanitary Research Laboratory, has been making special

field investigations on behalf of the State Department of Health in Maine.

Professor S. C. Prescott, '94, has been invited to undertake special work upon the conservation and salvage of foods by the food division of the Medical Department of the U. S. Army, and has already begun his work.

Mr. Horowitz, instructor in Biology and Public Health, has been continuing, during the summer, his sewage investigations at the Experiment Station of the City of Brooklyn in New York. Professor Stiles was recently invited to give his whole time to food work under the Medical Department of the Army, but was unable to accept because of his urgent duties in teaching.

Malcolm Lewis, '14, has resigned his position as health officer of South Orange, N. J., and become epidemiologist to the State Department of Health of New Jersey, with an office at the State House in Trenton. The large concentration of men at Camp Dix has thrown upon the State Board of New Jersey unusual problems, some of which will be dealt with by Mr. Lewis.

James A. Tobey, '15, late assistant in the Military Department, M. I. T., and a graduate of the Course in Sanitary Engineering has resigned his position as health officer of West Orange, N. J., to become assistant to the Bureau of Sanitary Service, American Red Cross, in the work of this bureau around some of the southern cantonments.

Professor Gunn's work as secretary of the American Public Health Association and editor of the *American Journal of Public Health* has been assumed by Mr. A. W. Hedrich, late health officer of East Chicago, and last year a member of the Harvard-Technology School for Health Officers.

F. J. Funk, '15, formerly assistant in Biology and Public Health, has become one of the chief sanitary inspectors of the Bureau of Sanitary Service, American Red Cross, with an assignment for duty at Louisville, Ky.

A. S. Bedell, '17, a graduate student last year in Biology and Public Health, has been appointed assistant bacteriologist to the State Board of Health of New York.

F. Bernard, '17, when last heard from, after training at Plattsburg, was commissioned second lieutenant and had been assigned to work in the Quartermaster's Division.

J. P. Connolly, '17, after work with the State Board of Health

during the summer, has been assigned for duty in the extra-cantonment zones under the American Red Cross, Bureau of Sanitary Service.

News has lately been received from George W. Bakeman of Course XI, who is still doing Red Cross work at Petrograd. He was recently offered the position of vice-consul.

Philip S. Platt, a former student, after sanitary work in Belgium, in Petrograd, and in Vladivostock, has recently done similar service in France.

The absurd story about women being just now admitted to the Harvard-Technology School for Health Officers has come to the surface again in connection with a reported opening of the doors of the Harvard Medical School to women. The truth is that as soon as the question of women in the Health School was brought to notice, and that was only a month or two after the opening of the school in 1914, it was decided that they are eligible to the Harvard-Technology School according to the Technology principle of admitting students without reference to sex or race. There are certain courses, however, usually given in the Harvard Medical School to which women are not admitted, but the coöperative school will accept the equivalent of this work if performed elsewhere. Women can and practically could always take the Harvard-Technology Health School work.

TRAINING CITY MANAGERS

Special relations to public health and sanitation suggest plan
of education along broad lines

BY MURRAY P. HOROWITZ

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Reprinted from the *Engineering News-Record*, August, 1917.

According to statistics compiled up to January 1, 1917, there were 99 towns and cities in the United States that were governed under the city-manager plan. Of these, 70 per cent. were cities with populations under 10,000, and 86 per cent. with populations under 25,000. It is becoming apparent that the city-manager plan is growing in favor, particularly among cities of the residential type. It seems almost certain, therefore, that in the near future there will be a demand for expert municipal managers, which means that such managers ought to have special training and that our highest institutions of learning, especially our engineering schools, should recognize and meet this demand.

Modern health activities have become so wide in their scope that they touch the community in most of its vital parts. Public health today is applied biology in its highest and most interesting form, dealing with the effects of varying factors on the health, welfare, comfort and convenience of the people. A safe and adequate water-supply is essential to the life of any community; likewise, proper and adequate means of sewage disposal. The control of the city milk supply and other food materials is also essential. The removal and disposal of garbage, refuse and ashes frequently also demand the attention of the health official, particularly in the smaller communities. Lately there has developed a realization of the important relationship between the public health and industry, economics and sociology. This includes such subjects as industrial hygiene and sanitation, wages, hours of employment, poverty, alcoholism, the improving of the condition of the poor, school hygiene and sanitation, recreation, protection against street accidents, the establishment of comfort stations, and many other activities.

The interest of the health official is thus apparently very wide and all inclusive. The importance of this and the realization of the necessity to train men for this work, were recognized very early by W. T. Sedgwick, professor of biology and public health at the Massachusetts Institute of Technology. Many of the leading health workers throughout the country have obtained their training under him. The time is now ripe to take another step forward and to bring the training in sanitary science to even greater service to the community by training men to be city managers.

Before outlining the plan of education for the town manager, let us observe what his duties and interests should be. The town manager must be an efficient business man, with a thorough knowledge of business methods. He must have knowledge of and be interested in effective and adequate transportation facilities, fire protection, police protection, health protection, water supply, milk supply, food supply, sewerage and sewage disposal, garbage and refuse collection and disposal, street cleaning, street lighting, street paving, parks and recreational facilities, markets, relief work and other civic activities. The town manager should also have knowledge of the principles of government. Neither is it hoped for nor desired that the town manager shall be an expert in all these various fields. But it is expected that he shall have at least a knowledge of the important principles of these different activities.

It is realized that, although the training offered in the department of biology and public health at the Massachusetts Institute of Technology fits one for activity in many of these fields, yet it falls short of the requirements of the new and larger profession. But it is possible to formulate a course that may be molded about such training offered in the department of biology and public health, which will develop trained and efficient town managers. The writer proposes to show how this may be done by combining work in different departments at a school like the Massachusetts Institute of Technology.

COMPOSITE GRADUATE COURSE SUGGESTED

This course should be a graduate course, given jointly by the departments of biology and public health, civil and sanitary engineering, and economics and statistics, and should lead to the degree of bachelor of municipal engineering. The following courses are taken from the 1916 catalog of the Massachusetts Institute of Tech-

nology and give an idea what the proposed course should consider. Any person interested may obtain a better idea of the nature of the courses by consulting the catalog.

SUGGESTED COURSES FOR DEGREE OF BACHELOR OF MUNICIPAL ENGINEERING

COURSE No. DEPARTMENT OF BIOLOGY AND PUBLIC HEALTH

731	Elements of bacteriology
733	Bacteriology of air, water and food
738	Public-health laboratory methods
739	Biology of water and sewage purification
742	Bacteriology in relation to refrigeration, canning and food preservation
743	Control of city milk supplies
751	Biology of infectious diseases—II
753	Industrial hygiene and sanitation
755	Public-health problems
756	Principles of sanitary science and public health
757	Public-health practice
762	Sanitation of houses and public buildings
770	Public-health field work
772	Sanitary law
773	Public-health administration
780	Journals

DEPARTMENT OF CIVIL AND SANITARY ENGINEERING

130	Highway engineering
137	Highway specifications
175-6	Hydraulic and sanitary engineering
177-8	Sanitary engineering
181	Engineering of water and sewage purification
190	Vital statistics
199	Specifications and contracts

DEPARTMENT OF ECONOMICS AND STATISTICS

35	Transportation
38	Securities and investments
45	Labor problems
58	Business management
60	Business law
70	Taxation

DEPARTMENT OF HISTORY AND POLITICAL SCIENCE

38	Municipal government
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Courses dealing with municipal markets, organization of charity and relief work and any other matters that may be found necessary to consider, should be added.

It would be advisable to have several series of three to six special lectures given by experts in their particular specialties. In this way the special problems related to the general activities of a town manager may be adequately considered.

The students must of necessity be mature men, preferably about thirty years or over. They should be men who already hold an academic degree. They should also have had training along engineering lines. Experience in municipal work would of course be an asset. Candidates in this new course should be men of pleasing personality and good address. They should show tact, intelligence, executive capacity, the ability to write well, speak well and to meet people. They should of course be honest and energetic and possess the ideal of service to the community.

The course itself should require at least two years' residence, ending with a special piece of work in the field. There may be added later a course leading to the degree of doctor of municipal engineering, which will require longer residence and more intensive work and research.

It is hoped that the above plan or one similar to it will be adopted in the near future by some high institution of learning, like the Massachusetts Institute of Technology. The need for such trained men is already felt and will become more pressing in the future. Furthermore, it represents an effort to bring municipal administration out of politics as much as possible and to place such government on an honest and efficient basis, with the ideal of community service paramount. An accomplishment of this nature would be a boon to the people of this country.

WRITING A TECHNICAL REPORT

Analysis of successful reports points the way—Keeps reader in mind—Elements of report—The appendix

The following article by William Green, '06, instructor in Report Writing at the Institute, is reprinted from the *Engineering News-Record*:

The man who must write a technical report is often at a loss. Even though he is sure that through his past experience and recent investigation he is fitted to treat some phase of a subject, he feels that because he is not a practiced writer he cannot successfully convey his information.

He therefore seeks to write by the method to be acquired most quickly; and since he knows of good technical reports which have been produced by others who, like him, must have had small opportunity to practice writing, he very often decides that there must be a trick to report writing. Almost everyone who has to write reports goes through the state of being sure that somewhere there is a device which can be used like a general formula, in which one has only to substitute particular values. Search reveals no such device. It is a fact, however, that good reports are being written by those who have obtained all their practice from writing business letters, and an analysis should bring out methods by which others who have like equipment can produce successful technical reports.

CONSIDER THE READER

The purpose of this discussion is to show that *the selection of material, its arrangement and the manner in which it is presented are determined through consideration of the reader and his peculiar need of information regarding a definite subject*. It is only thus that a report can be made both adequate and concise.

A technical report differs from other forms of exposition in that invariably it is not the writer, but the reader, who has suggested the subject. Before the maker of a technical report begins his writing, the reader has asked for information on definite phases of a definite subject; he may have suggested the scope of the investigation, and he has indicated to what degree he wishes the writer

to make recommendations. The writer has been asked a definite question; his reply is a technical report.

The technical report must always contain the following material, usually in the arrangement here given. It must be noted that in many reports parts shown as coördinate in the outline are very different in the space required for their treatment.

A. The report proper: (1) The question—(a) occasion for the report; (b) scope of the report. (2) Methods used in the investigation. (3) The reply to the question.

B. The appendix.

The report proper must stand as a unit. While it is a reply to one who has asked a definite question, it must be so written that the report will be useful not only at the time it is received by him, but also at any future time when the related phases of the question are not so clearly in mind. Moreover, while its chief end is to furnish information to someone whose interest has caused him to ask for it, it must not fail to give the information in such a way that it can be used by others. To accomplish these ends, the writer must record the question (1). To do this, he should show the occasion for the report (a). Here there must be a pointed reference to the order and, if any exist, to the formal appropriation that led to the undertaking of the report, and to all subsequent related orders and memoranda. Then there should appear a statement of the scope of the report (b). This must be an exact definition of the subject treated. The exact statement of this subject can usually best be accomplished by quotations from the request for the report. Often the field to be covered can be made more clear by pointing out closely related phases of the subject that have been purposely left out of the discussion. A statement of the methods used in the investigation (2) is important, for newly discovered information may at any time affect the value of the conclusion reached in a given report. It is therefore of the utmost importance that the author should state explicitly what methods he used.

After the brief introduction described above, the report proper takes up the reply to the question (3). This is the main body of the report.

KEEP THE READER IN MIND

The peculiar needs of the reader determine for the writer what topics he should include in his report and what he should omit.

Even if the writer has exactly the information his reader requires and has no misapprehension as to the subject he is expected to cover, his report can be effective only in so far as he knows his reader and keeps in mind his needs. Unless the reader is known to the writer, the latter may fail to be adequate by excluding necessary information; or he may fail to be concise by giving information that is not needed, as when definitions are supplied to one who is familiar with technical terms. Even when he knows his reader's needs, the writer may neglect to keep them clearly in mind. Often when a layman has asked an expert for information, the specialist's enthusiasm leads him into writing a report that could be useful only to another specialist. A report is written not only on a definite phase of a subject, but also to a definite person. No report can be effective where the reader's needs do not govern the selection of the subject matter.

Moreover, the style of the report is controlled by the writer's relation to the reader. To carry its message most quickly and forcefully, the report must be concise. Sometimes a report should take the form of a flat statement. Amplification and substantiation must be included in such a report; but they are placed there, not so much for the reader's attention, as because there they may be most conveniently kept as a matter of record. On the other hand, a method of presentation so concise should be used only when the recognized authority of the writer is unquestioned, and even then, only when a full understanding of the reasoning would require on the reader's part more study than is warranted by his interest. In all other cases the man who wishes to write an adequate report must tell the whole story, and he must tell it in a way that can be fully understood by him to whom the writer is reporting. Yet here again the reader's knowledge of technical expressions and symbols determines how concise the report may be. When technical terms are mutually understood, definitions are tedious; and when there is no doubt that a plotted curve will convey information—that it can be “read”—pages of exposition may often be eliminated. Through careful study of the reader it is possible to adopt for each report a suitable style.

FUNCTION OF APPENDIX

Granting that a division of the material to be presented in the report proper and the appendix is wise, we must assure ourselves

that each is so written that it fulfills its part. In the report proper we must be as direct and as concise as will be allowed by the reader's ability to follow our treatment. Since we have the appendix, we may by conveniently placed references to it refer the reader to any explanations or substantiations. In the reply to the question the reader can thus be given a direct route. If his inability to understand, or his unwillingness to accept a statement without supporting data requires a deviation, he of his own volition turns aside from the direct path. No other thing so tends to make a report effective and useful as a reply to the question which logically and as briefly as may be leads the reader straight through to the answer of his question.

But the report must be a complete discussion of the phase of the subject it is treating. Therefore, it must substantiate its thesis, and there must be no doubt that all of its statements are understood. Material necessary to fulfill these conditions is placed in the appendix. There should appear in the appendix all important original data gathered for the report. Any general information that in the opinion of the writer may be inaccessible and needful to the reader should be given fully, and there should appear exact information as to where subjects like that of the report, or related phases of the subject, may be consulted.

HELP RE-MAKE THE WORLD!

What has been called one of the most valuable and promising advances in education since the war began, looking towards the closer coördination of American schools and colleges, and their resulting closer contact with the world in its present imperative needs, has been taken by the publication of the following advertisement throughout the United States early in September, and signed by forty universities, colleges, technical and engineering schools.

Of especial interest to Institute men is the fact that Professor George F. Swain of Technology and Harvard, was one of the prime movers in bringing this about, a willingness on the part of our schools to work together which cannot help but have an important and lasting effect on the relation of American education to the problems of American life.

The advertisement was headed, "Help Re-make the World!" and reads as follows:

"The call of the time is for the engineer or applied scientists, including the physician and sanitarian. Young men who are ineligible for military service for one reason or another, or who can render better service by completing their technical courses, should train themselves to become builders of the future.

"Vast parts of Europe are in ruins. Our own railroads and industrial equipments will need rebuilding after the terrible strain of wartime. Yet the supply of technically trained men does not meet the demand *now*. When the war is over the demand will be still greater.

"America must take a leading part in the reconstruction of the world. Products of our factories, farms and mines, raw materials and finished products will be needed in enormous quantities. Physicians and sanitarians must be supplied to aid the wounded and to restore sanitation.

"War is not only fought at the front. And if you cannot serve there you should train yourself technically to direct production of clothing, chemicals, food, munitions and machinery of war. And then in the days of reconstruction to come you can help to repair the ravages of war.

“Men who hold the helm of the Ship of State voice this appeal. Let them convince you that if adapted for applied science you are urgently needed in that field. Read and heed their words. Do not allow the supply of trained engineers, chemists, biologists, agriculturists and physicians to be depleted. Enter or continue in a technical school if qualified for such a career. You will thereby be performing a patriotic duty and will help the industrial progress of America and of the world.

“Brooklyn Polytechnic Institute; Brown University; Carnegie Institute of Technology; Case School of Applied Science; Clarkson College of Technology; University of Colorado; Thayer School of Civil Engineering, Dartmouth; Drexel Institute; George Washington University; Harvard University; University of Illinois; Johns Hopkins University; Lafayette College; Lehigh University; Leland Stanford Jr. University; Massachusetts Institute of Technology; University of Michigan; Michigan Agricultural College; Michigan College of Mines; Missouri School of Mines; University of Missouri; New York University; Towne Scientific School, University of Pennsylvania; Princeton University; Rensselaer Polytechnic Institute; Rose Polytechnic Institute; Rutgers College; Sheffield Scientific School, Yale; University of South Dakota; Stevens Institute of Technology; Syracuse University; University of Texas; Tufts College; University of Vermont; University of Virginia; Washington University, St. Louis, Mo.; University of Wisconsin; Worcester Polytechnic Institute.”

NEWS OF ALUMNI ASSOCIATIONS

TECHNOLOGY CLUB OF PHILADELPHIA.—At the December or January meeting, Dr. Hollis Godfrey, '98, president of Drexel Institute, will speak on the work of the National Council of Defense, of which he is chairman.

At the October meeting, the club was honored by the presence of Professor Pearson from the Institute; Mr. James P. Monroe, '82, vice-chairman of the Federal Board for Vocational Education, and chairman of the M. I. T. Committee for National Service; Mr. John M. De Bell, '17, in charge of the Washington office of the M. I. T. Committee; and Mr. Paul C. Leonard, '17, chairman of the Managing Board of the *Tech*.

Mr. Monroe told of the work of the M. I. T. Committee for National Service which has taken over the duties of the original committee in connection with the mobilization and census of the alumni.

Mr. Leonard spoke of the work of the student paper, *The Tech*, which has become an alumni as well as a student organ. The *War-Time Tech* will give news from the alumni organizations and accurate condensed information from headquarters at Washington and Paris. If you are not a subscriber, send \$1.50 to Mr. C. A. Anderson, '05, chairman of the local committee, 327 Commercial Trust Building, Philadelphia, and you will receive *The Tech* twice a week for six months.

Moving pictures taken at the Technology Training Camp at Camp Cunningham, Maine, were shown for the first time, and the camp life was described by Mr. De Bell. This camp was maintained for the undergraduates during the summer months.

Professor Pearson told of the work being done by the men in the service and gave examples of the difficult problems which have been solved. Chemists, especially, have been in great demand, many of the men having been engaged on problems in connection with gas defense.

Dudley Clapp, '10, former secretary of the club, is a first lieutenant in the Sanitary Corps. Other members in the service are W. M. Ruby, '12, and J. B. Wells, '16, first lieutenants, O. R. C., and Everett St. John, '13, with the Coast Artillery Corps.

The engagement of Miss Mildred G. Smith to H. J. Danforth, '14, member of the club and now in Atlantic City, has been announced.—*N. A. White, '06, Secretary, 1317 Spruce St., Philadelphia, Pa.*

TECHNOLOGY CLUB OF EASTERN NEW YORK.—The following men attended the first series of military training camps: H. E. Dexter, '12, S. P. Kimball, '11, H. W. Dun, Jr., '09, Russell Suter, '00, Harold Worthington, '15, and E. H. Sargent, '07. All these men received their commissions except Kimball, who failed to qualify physically. Sargent is a captain in the 20th Engineers and is regimental adjutant. Suter is a captain with the 119th Engineers. Dun is a lieutenant with one of the railway regiments. Dexter is a lieutenant with the Gas and Flame Regiment. Since then, Duncan Dana, '16, has joined the Signal Corps, and C. M. Currier, '14, and F. C. Lincoln, '17, have been conscripted in the National Army.

In another line of service, the Research Laboratory of the General Electric Company, under the direction of Dr. W. H. Whitney, '90, which is one of the largest institutions of its kind in the country, having a force of 280 trained scientists, has about 90 per cent of its new men now devoting all their energies to scientific investigations tending to the solution of many of the government problems. Dr. Whitney is assisted in his directory capacity by Dr. H. W. Coolidge, '96, and L. A. Hawkins, '99. Dr. Whitney, as a member of the Naval Consulting Board, with Dr. Coolidge, is carrying on extensive investigations upon various devices in connection with the work of this board. Mr. R. C. Robinson, '01, and Dr. Coolidge are developing the Coolidge X-ray tube in a portable form for the use of base hospitals of the Red Cross. W. C. Arsen, '01, and Stuart Thomson, '09, are engaged in the study of smoke bombs for use as screens and signals. H. B. C. Allison, '11, is carrying on research work upon special tool steels for ordnance and other purposes, and Geo. M. J. Mackay, '08, is working on special applications of portable wireless outfits for various arms of the service.

The other departments of the company are actively engaged in government work such as the development of special searchlights for the Engineering Corps, and apparatus for the electrical propulsion of ships.

In the local plant of the General Electric Company, in Schenectady, there are sixty-two Technology men serving in various capacities, but all doing their "bit" at their present work.—*E. H. Sargent, Secretary, care Conservation Commission, Albany, N. Y.*

INDIANA ASSOCIATION, M. I. T.—The club has kept up our monthly luncheons at the University Club; recently we had a little dinner for Professor Pearson, when on his Western trip.

William G. Wall, '96, our vice-president, is "somewhere in the East" designing "tanks." William Winter, '03, has received his commission as an officer in the Aviation Department. Severance Burrage, '92, is in Serbia.—*Wilson B. Parker, Secretary, 805 Board of Trade, Indianapolis, Ind.*

THE TECHNOLOGY CLUB OF NEW YORK.—An election of officers was recently held and the following officers and governors were elected:

Officers: President, Ira Abbott; vice-presidents, Daniel W. Edgerly, Edward M. Hagar, Clifton W. Wilder; treasurer, Frank C. Schmitz; assistant treasurer, William A. Evans; secretary, Thomas C. Desmond.

Governors: William A. Evans, T. Howard Barnes, Noel Chamberlin, Hewitt Crosby, Edward H. Dewson, Frank P. Montgomery, Franz Schneider, Raymond S. Willis, A. P. Mathesuis, A. L. Davis.

The Technology Club, at the last meeting of the Board of Governors, passed a resolution remitting the dues of all members of the club in the active service of the Government. At the same time it was authorized to insert advertisements in the *Monthly Club Bulletin* in order to make an addition to the revenues of the club to meet the conditions resulting from the loss of dues.

Nearly 200 members of the Technology Club of New York are at present serving the Government in some capacity or other.

Franz Schneider, Jr., has been appointed chairman of the House Committee and Mr. Thomas C. Desmond chairman of the Entertainment Committee.

The Technology Club of New York is filling a useful purpose in acting as a home for many of the men in military service who pass through New York in connection with their military duties. There are many men in uniform constantly around the club, and many of the men of the club, who are not in the actual military service

of the Government, are engaged in war industries, such as ship-building, munition manufacturing, etc.—*Thomas C. Desmond, Secretary, 17 Gramercy Park, N. Y. C.*

TECHNOLOGY CLUB OF CHICAGO.—Robert A. Allton, '13, who served last year with the First Field Artillery, Illinois National Guard, on the Mexican border, attended the first officers' training camp at Fort Sheridan, receiving a commission as captain of artillery. He is now with the Rainbow Division.

Guy Bolte, '10, and Harold Lockett, '10, are attending the second officers' training camp at Fort Sheridan.

Daniel A. Tomlinson, '12, who also served on the border last year as quartermaster-sergeant with the First Illinois Engineers, is still with that command "somewhere in Illinois."

Horace S. Baker, '03, who also served as lieutenant with the First Illinois Engineers on the Mexican border, is reported to have received a commission as major, and is engaged in supervising the construction of one of the southern cantonments.

Sam Greeley, '06, assisted by J. T. Cheney, '03, has had charge of the water and sanitary construction at Camp Custer, Battle Creek, Mich. This cantonment will provide for approximately 35,000 men. At this writing, Nov. 1, the work was practically completed.

Cecil F. Baker, '07, architect, has removed to Kansas.—A. E. Nash, '02, is with the Du Ponts in Wilmington, Del.—Edward G. Thomas, '87, is with the Toledo Scale Co., Toledo, Ohio.—H. B. Pulsifer, '03, has been elected to the professorship of metallurgy at the Montana State School of Mines, and sends us greetings from Butte. Everyone knows, of course, that V. R. Lansingh, '98, is in Paris and of the good work he is doing for our boys "over there."

There are a very considerable number of other members of this club engaged in military activities, but in these times it seems they are too busy to bother with keeping the secretary of an alumni association informed of their doings.

The annual outing of this club was held on September 8 and 9, at Channel Lake, Illinois, as guests of Richard E. Schmidt, '87, and Mrs. Schmidt, and we had a most thoroughly enjoyable time.

On April 29, Philip G. Carter, '93, died of apoplexy at his home in Chicago. Mr. Carter made his home in Chicago ever since leaving the Institute, having been connected with the Hecla

Winslow Company for twenty-four years. He leaves a mother, also a daughter, Florence, and a son, Philip Churchill Carter.—*Harvey S. Pardee, 212 West Austin Ave., Chicago, Ill.*

TECHNOLOGY CLUB OF NORTHERN OHIO.—A. A. Gould, '10, captain in Motor Transport Division, is back in Cleveland for a short stay because a *little* Chevrolet backfired and broke his arm. He intends to recommend self starters in the future, and continue in service for the British Government on truck inspection work.

D. P. Rogers, '14, is driving an ambulance for the British Red Cross on the Italian front, and in a letter received from him dated the first of September he says: "As soon as the roads could be connected across what was previously 'no man's land' we got four of our ambulances across, and I drove one of them. We had a rather strenuous time with traffic and bursting shells, but eventually got through. I was protected by the one-fourth inch steel plate overhead, which protected me from the shrapnel which hit my car." Mr. Rogers' address is care of First British Ambulances to Italy, 123 Pall Mall, London, England.

George Merryweather, '96, is at Washington aiding the Government in the inspection of machine tools.

The secretary, who is partly responsible for the *Cleveland Engineering Society Weekly Bulletin*, greatly appreciates the value of *The Tech*.

Don Stevens, '11, is in charge of the Flying Field and U. S. Navy Aviation School at the Goodyear Tire and Rubber Company. Here the blimp type dirigibles are being erected under his supervision, and U. S. Navy men are being trained in free balloon, kite balloon and dirigible balloon flying. The men are being trained by R. A. D. Preston, '10, who has long been one of the foremost men in the country experienced in balloon aviation. He is working night and day to train the U. S. Navy men for coast defense work. The equipment includes the largest hangar and gas generating plant in the country. The hydrogen plant is operated by C. N. Hand, '16. A detail of eighty U. S. Navy men are encamped on the premises.

"Phil" Kerr, '11, has accepted a first lieutenant's commission and is working on supplies in Washington, with particular reference to the tire business.

H. W. Treat, '13, is now captain and is working on the supply end of the lighter-than-air-craft production.

J. E. Hale, '08, is putting a great deal of his time into the design of gas masks for Government war orders as well as solid tires.

Major Bradley Dewey, '09, in charge of Government gas masks production, has been a recent visitor at the plant and has associated with him, Woodruff, '11. Other Tech visitors have been Lieut. Commander G. C. Sestervelt, '08, now stationed as superintending constructor of air craft at the Curtiss Aeroplane Co., Buffalo, N. Y.

K. B. Kilborn, '11, has returned from his honeymoon.

C. R. Johnson, '11, has a daughter, Kathleen.

R. Ferris, '08, has left Akron to accept Government service in Washington.

There has not been a meeting of the Northern Ohio Technology Club recently so that news of our members is all that can be sent at this time.—*C. B. Rowley, '12, Secretary, H. W. Johns-Manville Co., Cleveland, Ohio.*

Proposed Pratt Naval School Delayed

Plans are well established for the erection of the Pratt Naval Architectural and Marine Engineering School, an adjunct of Technology, but the Institute will not proceed with the construction until times become more normal in the building trades. The Pratt School was founded by the late Charles Edward Pratt, who bequeathed the Institute \$750,000 for that purpose.

Judge Crosby, in the Supreme Court, heard a motion by the Institute for permission to sell certain real estate of the testator for the purpose of raising funds to commence building operations. The desired amount may be obtained by the sale of four parcels of real estate in various sections of the city.

As the bequest is in the nature of a public charity, the Attorney General was brought into the matter as a respondent. In his answer, he stated that he would be satisfied with whatever action the Court took; but Judge Crosby believed that those parties having beneficial interest in the estate should be heard if they so desired. Judge Crosby decided that he would set a date for a hearing after notices had been sent to the various beneficiaries under the will.

According to Mr. Pratt's will, if the plans as made by him for the establishment of the school are not carried out, the fund will revert to his residuary estate.

TECH MEN IN THE PUBLIC EYE

This is to introduce ROBINSON PIERCE, farmer and dairyman of South Easton. If the residents of that town know anything about it he is the pluckiest man in four counties. They wouldn't put the limit there, but for the sake of having ourselves believed we will.

A little over ten years ago he was known to the students at the Massachusetts Institute of Technology as Prof. Robinson Pierce, and he presided over their physics lectures and recitations. Almost overnight he became completely and hopelessly blind. Whether long hours of study and research were responsible doesn't matter now. The story lies in what he did with that blindness.

At Brown University, where he was graduated in 1902, and at Princeton, where he took postgraduate work, he was known for his self-reliance. Although the chemistry and physics he had depended upon for his income would no longer help him, that same independence put him on the road to success.

He decided to become a farmer. It is acknowledged to be something of a problem for an experienced person with all his faculties to wring a comfortable living from a farm, but for a blind man with a colossal ignorance of farming to put over the trick is regarded as little less than a miracle down in South Easton.

Through sheer pluck and determination Robinson Pierce has achieved the apparently impossible. He has managed to feed and care for some 550 hens; he has taken all the care of from 10 to 12 cows, he has laid cement floors, built hen pens, put up the thousand and one fences and posts that must be kept up about a farm. He has driven kegs of nails, picked apples, vegetables, even cherries. He has weeded gardens, thinned out plants, even picked potato bugs.

The gasoline engine which pumps water for his stock is his sole charge and he takes it to pieces on an average of once a week regularly. He has succeeded in coaxing it out of obstinate moods which his most experienced men were unable to overcome.

In short, Robinson Pierce, although blind, is living about the average hustling life of the modern farmer. By the very force of his determination he has succeeded in living an entirely normal

and useful life. He disregards his affliction altogether and proceeds on the basis that a blind man can do whatever a man who sees can do if he is only determined enough and takes long enough about it.

GODFREY L. CABOT, '81, a wealthy manufacturer of Boston, president of the Aero Club of New England and a vice-president of the Aero Club of America, has put \$30,000 at the disposal of Rear Admiral Bradley A. Fiske, U. S. N., retired, the inventor of the torpedoplane, for the development of a craft capable of carrying and launching a full-sized torpedo the weight of which is 2,000 pounds. In announcing his gift Mr. Cabot said he was convinced the torpedo plane offered the only apparent means of destroying the German fleet, which, in Kiel and Wilhelmshaven, is protected from attack by other war vessels, rows of mines, and shore batteries. Mr. Cabot intimated also that if \$30,000 were not enough for the purpose he would enlarge his contribution. The United States Government so far has not experimented with the torpedoplane, and it is hoped now that, with the aid supplied by Mr. Cabot, the device may be developed to such an extent that its adoption by this government will follow as a matter of course.

JOHN C. FRAZEE, '06, of Philadelphia, has been appointed Federal director and superintendent for Pennsylvania of the United States public service reserve. The reserve is enrolling an industrial army of skilled adult workers, men who stand ready at the call of their country to drop their present occupations and fill places where they may be of greater service in war emergency work. From this reserve will be drawn men as needed by the Government or by concerns employed in work essentially connected with the war.

In accepting the appointment of Secretary of Labor Wilson to the directorship of the United States public service reserve for Pennsylvania, John C. Frazee brings to his new position an experience which has covered many years in similar fields of activity, and which will enable him to assume the responsibility of enlisting, in voluntary service, the large number of skilled men which new war industries are increasingly demanding, with a training which began in boyhood in a locomotive machine shop.

Mr. Frazee, after graduating from Coe College, Iowa, spent a year in the Massachusetts Institute of Technology, which he left fifteen years ago to enter the Jones & Laughlin Steel Company,

Pittsburgh, one of the great independent steel plants in the country. He then went on the faculty of the Michigan State College of Mines and then to the Pacific Coast in educational work. Returning to the East, where he became a teacher in extension training for engineering students at Columbia University, New York, he came to Philadelphia four years ago as assistant superintendent of schools, taking charge of the city's vocational education and extensional training.

Mr. Frazee is now vice-director of the department of civilian service and labor of the Committee of Public Safety of Pennsylvania, and was made an officer of the Department of Labor, in Washington, at the beginning of the war.

WILLIAM Z. RIPLEY, '90, who has been announced as a candidate for a director of the Rock Island Railroad, by one of the factions contending for the mastery of that road, is a professor of Harvard University, whose books on "Trusts, Pools and Corporations," "Railroad Rates and Regulation," "Railroads—Finance and Organization," have put him in the first rank as a student and authority. A graduate from the Massachusetts Institute of Technology in 1890, he joined the Faculty of that institution in 1895, and, until 1901, taught economics there. Then he was called to Harvard to take the chair of political economy, a position which he still holds. For a time he was connected with the Federal Industrial Commission as an expert adviser on transportation. Professor Ripley has another favorite subject, namely, racial distribution in Europe and in the United States; and his contributions to the study of anthropology have been notable. As an authority in this field of research he has lectured before the leading society of British anthropological specialists. If he is chosen to the directorate of this important railroad he will bring to the consideration of its policy an informed and honest mentality, for Professor Ripley has consistently told the truth about American finances and railroading as he has seen it; and this without any fear or favor in an institution where what he has had to say has hit alumni and officials.

GEORGE B. FORD, '00. Pains are being taken to insure the proper expenditure of the hundred million dollars solicited for the Red Cross. It is well that people who contribute to the fund should know about its expenditure.

A special commission, called the War Council of the Red Cross will be sent to Europe to report on conditions and arrange for the work which the Council plans to do with the money.

George B. Ford of New York City is one of the special commissioners selected for this service. With the very best training, received at Harvard University, the Massachusetts Institute of Technology, and in Paris, he began his professional career as an architect in Boston in 1901. Five years later he was called to New York, and became a member of one of the finest firms in that city.

His specialty was those features of construction which relate to environment and appearance, and, his ability proven, he soon came to be consulted on questions of city improvement and the planning of civic centers, in which capacity he has served many of the cities of the country, and shaped some of the largest reconstructions of community life yet undertaken in the United States.

Not only is he vouched for as a man of strict integrity, but in the reconstruction of communities in France and Belgium, torn by the war, in which the Red Cross plans to share with its funds and advice, he will prove to be unusually competent.

MISCELLANEOUS CLIPPINGS

Editorials on the Institute's State Grant

Believing confidently, as one must, in the essential desire of the people of the Commonwealth to preserve good faith in the performance of the contracts which the State has with the Worcester Polytechnic Institute and the Massachusetts Institute of Technology, it is necessary also to remember that the case is complicated by certain legal and technical considerations. These cannot be left to the operations of chance and of mere good will. They require the trained and expert opinions which only the lawyer can bring to bear upon them. In such circumstances the position which Mr. Charles G. Washburn takes is of distinct importance. He is convinced that no extraneous guarantees will suffice, but that if the State is to be preserved from doing wrong in the matter, the Constitutional Convention must find some definite and positive way of perpetuating the force of the acts passed by the General Court of 1911 throughout the full ten years during which the Commonwealth then promised that they should hold. Mr. Washburn thinks there must be an amendment to the amendment as written. This is regrettable, but let it be remembered that a State can have no interest higher than the interest of preserving justice, and let it be realized further that if any change is made to cover this vexing case it will be not an exemption of the two great technical schools from the terms of the Curtis-Lomasney amendment, but merely a warrant that the existing obligations of the State shall be performed before the full force of the new constitutional provision is allowed to affect them.—*Transcript.*

To the Editor of The Journal:

In your issue of July 31 you publish an excellent editorial pointing out the justice of not exempting the Massachusetts Institute of Technology from the terms of the so-called Curtis-Lomasney amendment to the State Constitution, which is to go on its final passage and to be finally submitted to the people.

You say, however: "We cannot agree that the appropriations should continue. . . . We do not believe that Tech herself will be seriously affected if the State appropriations are cut off immediately."

You are doubtless right in opposing any special exemption for Tech in the constitutional amendment; but there is room for doubt as to your assumption that Tech has lost, or will necessarily lose its \$100,000 annual appropriation.

In 1911 the Legislature voted an annual appropriation of \$100,000 for 10 years to aid the institution. This runs for four years more.

The Federal Constitution forbids the enactment of any law by a State Legislature impairing the obligation of contracts. This has been construed by the courts to extend to any act of a State Legislature granting any right, privilege or property. The famous Dartmouth College case so vitalized that provision of the Federal Constitution as to protect the grant of a charter or the vesting of any kind of privilege in a person, or corporation, by an act of a State Legislature.

The courts have also held in many cases, that a State Constitution is a law or act within the meaning of the Federal Constitution prohibiting the impairment of contracts. In the case of *Lehigh Valley Railroad v. McFarlane*, N. J. Equity 31-706, the court said: "A State constitution is a law within the meaning of that clause of the Constitution of the United States which ordains that 'no State shall pass any law impairing the obligation of contracts.' The State adopted a new Constitution in 1844, but the court held that this did not change a previous grant to the railroad."

In *Dodge v. Woolsey*, 18 Howard, 331, the Supreme Court held: "The fact that the people of the State had in 1851 adopted a new Constitution, cannot release the State from the obligations and duties imposed upon it by the Constitution of the United States."

In *R. R. Co. v. McClure*, 10 Wall., 511, the Supreme Court said: "The Constitution of a State is undoubtedly a law within the meaning of this prohibition."

The only question remaining is this: Is the act of the Massachusetts State Legislature of 1911 a contract?

If such act gave Tech any vested rights or privileges for 10 years, it is certainly a contract which the Federal Constitution protects.

The consideration is present and the conditions have been met. The fact that subsequent Legislatures will be compelled to act does not, it seems to me, destroy the act of 1911 as a contract.

The Legislature of 1911 was acting for the Commonwealth of Massachusetts, that is, the people. The Commonwealth continues as a responsible and corporate body, notwithstanding changes in the personnel of the several Legislatures.

It seems to me there is ample ground for maintaining the validity of the act of 1911 as a contract, protected by the Federal Constitution, which says that: "No State shall pass any law impairing the obligation of contracts."—*Edward N. Dingley*.

Speaking in excellent temper a morning paper takes issue with our declaration that the promise of the General Court in 1911 to pay the Massachusetts Institute of Technology \$100,000 annually for a term of ten years should be faithfully performed. Our contemporary urges the valid point that the passage of the Curtis-Lomasney amendment should not be endangered by any multiplication of special exemptions. This is true, and it is on this account that we did not ask for any eleventh-hour

change in the amendment itself or for any special exemption, but for guaranties which would now make as plain as possible the nature of the agreement which M. I. T. enjoys with the State. As Chairman Curtis said in the course of hearings on the amendment, with special reference to the case of Worcester Polytechnic Institute, which has a similar agreement with the State, if these acts of the General Court amount to contracts, then the amendment would not affect them, for the National Constitution would compel their performance. It has been made clear, the chairman has explained, that the committee accepted this view of the situation.

In other words, the naturally binding nature of the promise made by the Great and General Court has been of clear and simple appeal to many men's minds. Unfortunately, however, there is the technical complication that the promise of the Commonwealth was not couched in that fully explicit language as to contracting parties and signatories which would fully clarify its status as a contract. This must always be true of the acts of our legislatures. Do the people of Massachusetts desire that this technical shortcoming shall be permitted to override the implied pledge of the Commonwealth's good faith and credit? We cannot believe that public opinion is on the whole so minded, or for that matter so shortsighted. If it were, we should be living in a body politic of sad instability. At this time let there be no "exemption" of the Massachusetts Institute of Technology or the Worcester Polytechnic Institute from the terms of the Curtis-Lomasney amendment, but let it be clearly understood that both of these schools, and any other institutions now possessing the direct promise of the State to pay certain funds over a stipulated term of years, should be guaranteed the performance of those promises. There is no other way to make the good faith of the Commonwealth entirely clear, and we believe that the Constitutional Convention desires such integrity preserved to the end.—*Transcript*.

"Why, it is big and bare as a factory," disappointedly commented a Harvard graduate as the street car jogged along the Massachusetts avenue side of the new Technology at Commencement, 1916. That impression of utter plainness was not uncommon in the first months after the great massive structure over the Charles had been dedicated with appropriate exercises, but not adorned with the accessories of landscape architecture.

From a distance, from the Boston shore, it was seen that at last a piece of domed architecture had been projected on a scale big enough to count in looking over the wide Charles River basin. The Tech dome was felt as a fine if somewhat severe break in the skyline, a greater brother to the good one of the Shoe and Leather building.

But close up, especially when carried past in a car, the effect of gaunt-

ness was increased by the unkempt condition of the land to the rear of the main building. Even as viewed from the Cambridge Esplanade, the central court looked like a vast, empty hole, and the eye was carried past the northerly pavilion only into the cul de sac of a dump.

"Techs" are not made in a day, and even now, when the fine vistas about the Technology buildings have proved alluring to the lead pencil of an artist like Louis Ruyl, a score of schemes of beautification remain to be carried out. Plantings cost money and trouble, as everybody knows who has ever tried to train a hedge or create a rose garden about a suburban house. It may be years before the setting of this scientific school, incomparably the most conspicuous piece of architecture in New England, is really complete.

Stand about the middle of Harvard bridge, however, and take in the whole group as far as erected, and you realize the architect's intention to make something much nobler than an "educational factory." With one important gap still to be filled the eye travels from the severe lines of the main building to the generally similar but somewhat more frivolous Walker building, and thence to the pretty Florentine towers of the dormitories with the new president's house, a miniature Walker building, in front of them. Beyond, of course, is the admirable dome of the commercial building designed for the shoe and leather fair, and happily saved from demolishment after the collapse of that enterprise.

It is no slight task to put in order thirty acres of land still cluttered up with the debris of the building period, but here and there little lawns are beginning to appear among the network of tote roads. A sturdy road roller, bought originally to lay out an athletic track, has been busy all summer. Near the office of the contractors an open space of about an acre has been planned to be used as a park for motor cars.

Nothing haphazard is going on here, even though the work of introducing order and attractiveness does seem to hit upon a tract here and a corner there. The operations are all part of a comprehensive scheme, of course.

The planning has been entrusted to a woman landscape architect, Miss Mabel Keyes Babcock, Technology '08. This alumna was at first commissioned to design a garden for the president's house, for which a Tech graduate made a handsome donation. Her jurisdiction has now been extended to the entire grounds.

Under Miss Babcock's supervision some quite exciting operations have been going on since last May in the great court of the educational group.

The ornamental flagstaffs of the two inner courts were installed in time for the alumni gatherings of last June. At the same time arrangements were being made for the setting out in opposite corners up against the administration section of six nearly full grown maple trees.

To make this selection sixteen fine maples of Dedham were pulled up

by the roots. Tree experts went among them and scrutinized them for disease symptoms of one kind and another. Then the six that were found freest of taint and tarnish were hauled over to Cambridge and replanted in specially designed beds of earth. Guy ropes attached to them at this writing show that they are not yet considered strong enough to stand alone.

These trees, which will normally grow a few feet higher, serve a decorative purpose in relieving the severe lines of the architecture. They will at the same time form a scale, up to now somewhat lacking, by which to estimate the vastness of the structure behind. Only an extraordinarily tall tree could out-top these buildings; maples of the usual size will serve as an agreeable screen against the creamy white background of the section devoted to administration.

Smaller trees may be added as needed. The maples now in place will presumably grow to their full size as sufficiently deep earth beds have been provided. This provision is in contrast to the condition in which the diminutive maples and oaks along the esplanade are now growing, a dozen years after they were planted, for the roots of these can go down for only a short distance before they strike the original soggy salt marsh from which they can draw no sustenance.—*Boston Herald*.

Despite the Massachusetts Institute of Technology's many war services, it seems to be finding still time and energy for promoting the plans it had under way for progress in peace. Nearly a year ago the Institute first set in motion its scheme of co-operation with several large industrial plants, by which students in the department of chemistry were sent for practical experience and special training in large going concerns at several points throughout the country. Now the students of electrical engineering are to be given equal advantages by a similar arrangement with the General Electric Company in its factories at Lynn. In all this co-operative work, M. I. T. has taken a lead from the pioneer expeditions which the University of Cincinnati's technical school sent into this field. Doubtless the idea is destined to grow as part of the national American plan in technical education, benefiting both the schools and the corporations which undertake it. It is certain, however, that its ultimate value will be fixed by this test: "Do the students, as they come one step nearer to the practical work being done, acquire a newly keen realization of the urgency that their theoretical study should be both penetrating and broad if they are ever to solve the practical problems given them, or will they be more and more led to assume that applied science is all important and pure science subordinate?" Upon that question in the general realm of American scientific education the whole issue of America's future technical progress in equipment will depend. James Watt might have

worked all his life to invent the condensing steam-engine, but he would have worn his brains out before achieving success, if it had not been for the pure study of the properties of heat and of the vacuum, much earlier pursued on the continent to no apparent practical purpose.—*Boston Transcript*.

It is gratifying indeed to have from the Massachusetts Institute of Technology such definite news of its further plans for national **Technology's Service** service as offered by the announcement from Cambridge this morning. Throughout the summer the Institute has been maintaining three special schools—one for army aeronauts, one for naval aeronauts, and one to prepare men for officerships in the regular navy. This much the public knew, but it had no way to realize what permanency and further extension these enterprises were to assume. The Institute's announcement today makes this matter clear. Even though the regular fall opening of Technology will soon be at hand, with all the burden of work that its coming imposes, the special war sessions are to go steadily forward. What is more, the enrolments in all three will continue constantly on the increase, although an enlargement beyond 400 men in the army aeronauts' school, for example, could only be possible if the Government should see fit to construct special barracks for housing the entrants. The capacity of the accommodations now being provided in the regular Institute buildings has a limit.

What seems especial cause for satisfaction, in respect of all these M. I. T. efforts, is the co-ordination which it has been possible to establish between them and the specifications laid down by the War Department. Men in all three of the Institute's special war schools above mentioned are already enlisted in the Government's service before they begin their training at Cambridge. Consequently they should move with certainty to their places in active duty. Seeking an explanation of this success in arrangement, one can perhaps find it best in the obvious fact that technical schools ought to be able to meet technicalities. To drop the pun promptly, it is plain that an engineering school is under special advantage when it comes to filling those war requirements which directly involve many problems of engineering and science. But it is good that M. I. T. should be so well meeting this right expectation.—*Boston Transcript*.

Taking the American academic world by and large, it is quite impossible to say that either cultural or utilitarian theories of education have had any direct connection with the attitudes of administrators, professors or students toward the war. If Harvard has given lavishly of undergraduates and alumni and has been singularly fortunate in its prompt alliance with French military expert guides, the *Massachusetts Institute of Technology* has been quite as unselfish

**A Bit of
Cheer**

in the alliance of its expert professors with governmental commissions and departments of all sorts. So that in many respects it has become, and will remain, while the war lasts, a great national technical school doing in its way what West Point and Annapolis are doing for the professional soldier.
—*Christian Science Monitor*.

At last the humanizing touches are being applied to the vast spaces and structures of Tech in its superb new site across the Charles River. They are not the finishing touches, by any means—only the beginning of this much-needed process of bringing down the stupendous scale of the future greatest technological school of the whole world into some sort of correlation with the scale of environing civil institutions and that of society and human life. There were those who grieved and still grieve when the enormous Widener Memorial Library at Harvard obliterated the quaintly towered Gore Hall and all it stood for of the past, and generally overtopped and outclassed all the ancient layout of the Harvard Yard. But America is to be the world's example of the new order of big things. It is expected of it that it will henceforth head the procession of civilization, after saving it for the world and making the world safe for democracy. All the same, the process is at moments a painful one, giving us many wrenches and strains at the heart-strings, as the ground is cleared for the new in the demolition and uprooting of the old. To be sure, Tech had the unadulterated good fortune not to be obliged to destroy anything in the splendid efflorescence that has been watered by streams of the new American wealth of its grateful alumni. But the concrete expression of that wealth in the immense spaciousness and solidity of its expansion has been, to say truth, a little overwhelming. Planned for the long future, for the whole continent, for the whole world, indeed, it had to be outwardly, physically and manifestly in the spirit of the big things characteristically American. At last the humanizing of its bigness has begun in the planting of trees and vines.

This planting itself has been on the scale of big things, too. Well-grown trees, thirty or forty feet high, almost in their full maturity, have been bodily transplanted and now stand in the quadrangles at either side of the colonnade of the fine façade of the Administration Building. In the close between the newly housewarmed president's residence and the first dormitory building is some intensive gardening of the finest description. Around the edges of a rich lawn are grouped trees and shrubs, with some successful exhibits of trees trained to trellises to form living screens of verdure. Tall evergreens give a dignified architectural effect above the garden walls, cut out clean in their monumental shapes against the white walls of the dormitories, after the style of the old Italian palace gardens. Already the trees and vines have had a good healthy summer's growth. Even the ivies set out in little pockets of loam while the walls were going up, have made

a good start in their work of subduing the monotonous glare of the trans-Charles white city. It does not take long for city smoke to tone this light gray stone of the Tech buildings to an agreeable atmospheric tint, as shown by the present difference between the fresh whiteness of the president's house, compared with the harmonious grays of the great main building's far-flung wings. Acres on acres of fresh loam in cartloads lying now in heaps as they have been dumped, cover the space between the dormitories and the great building. And this, when finished, by another year, will abolish the present Sahara with a vast lawn, bounded on the further side with ranks of high-grown poplars, shutting out the manufacturing district's buildings beyond. The time is not so distant when all this space was mud flats, and then for a score of years afterwards, an arid desert of made land. Anybody who has had it in the prospect from home windows must be too grateful for the change to be critical. But this fitting of the great plant for human occupation and with human relations, and the coming associations with the life of the community, must, in time, temper the rather stark austerity of the architectural design and effects, so becoming to the purpose of the whole.

This summer's occupation of Tech by Government schools of training in various lines of warlike preparation has given us a foretaste of the feeling, undoubtedly to increase with time, that the Massachusetts Institute of Technology is not simply a Massachusetts institution, much less a Boston, or Cambridge, institution, any longer. It transcends State lines and even the nation's boundaries. The Institute has always had students from abroad, from Europe, from South America, but more particularly studious and brilliant representatives from Japan and China, many of whom now reward us in their influence in the East for better understanding between races which can have too little opportunity for duly understanding one another. Undoubtedly this is the secret of the complete revolution in the world wrought by the modern instant inter-communication by wireless and by telephone. Even the insular *London Times*, still sticking to the thunderer's role as organ of the British Empire, is fain to plead that "It is not nationalism that is unChristian, but irresponsibility"—the "irresponsible Government" that President Wilson told the Pope was the cause of all our woes. The omniscient and irresponsible State is, according to the *Times*, "a German dogma and the ground on which Germans rejected arbitration. . . . It will be a step in advance whenever a government is responsible to its own people; but internationalism goes further and requires that every government shall also be responsible to the arbitrament of an international court." In this next step of civilization's evolution the cosmopolitan scholarship of the Institute of Technology is certainly going to play an important part. Its setting across the Charles presents a picture not unworthy of this sublime role!—*Boston Transcript*.

Various complex problems present themselves in connection with the conduct of our schools and colleges during the war. This fact is fully recognized by the Council of National Defense, which **Education in War Time** convoked a large assembly of university officials in Washington last May to consider the situation, and subsequently also sought the advice of representatives of secondary schools. At the present time there is a strong Education Section connected with the Advisory Commission of the Council of National Defense, and it has held a series of meetings in Washington. This section, together with the Bureau of Education and the States Relations Service of the Department of Agriculture, constitutes a connecting link between the educational institutions of the country and the national government in matters pertaining to the war, and also provides the machinery for an interchange of opinions among educators and such concerted action as may prove feasible.

The supply of European scientists and technologists is already enormously depleted. The war has taken dreadful toll of both student-bodies and faculties at Old World centers of learning, and has also debarred an immense number of the younger generation in the belligerent countries from the advantages of a higher education. The moral of all this is that, instead of merely keeping our universities and technical schools up to their normal attendance—as urged by most persons who have discussed wartime education—we should make every effort to *increase* their attendance.

If we are in for a long war, then it is equally important from a military point of view to add to the brain-power of the nation by increasing the attendance at universities, colleges, normal schools and technical schools—now constituting little more than one-half of one per cent of the total population of productive age. Tuition fees should be lowered as much as possible. The hours of classes and the length of course should be arranged so as to give students greater opportunities for “working their way” through college. The abolition of the long summer vacation and the adoption of a school year of four terms of twelve weeks has been suggested as a means of enabling some students to complete their education, more rapidly and others to give a larger proportion of their time while in school or college to productive work. We must have more and more technically trained men, whether for war or peace—more doctors, more engineers, more experts in every line.—*Scientific American*.

The last twenty-five years witnessed an era of expansion of our resources for research and instruction, of the raising of standards of scholarship and productivity of such moment that many years before **Home Talent** the war began the migration of our students, especially also of our chemistry students, to Europe for the pursuit of graduate work and the securing of the highest type of professional training had

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practically ceased. It has no longer been a question of Berlin or Munich, of Goettingen or Heidelberg; for the prospective chemistry student it has been a choice of Harvard or Johns Hopkins, of Chicago or Columbia, of Illinois or California, the *Massachusetts Institute of Technology* or Cornell—I could extend the list much longer, but fear it would tire you. And it has been so because our young men have felt that they could secure just as thorough an education here as there, just as inspiring guidance from men whose research had made them masters in their own fields. Our Remsens and Michaels, our Richardses and Nefs, our Noyeses and Gombbergs, Lewises and Morses—to mention only a few of our leaders of this period—founded that independence in university education in chemistry which our country has the right to demand that we maintain.—*Science*.

Convention of the American Chemical Society Held in the New Buildings—Technology Alumni Prominent in the Proceedings

Five hundred chemical engineers and manufacturers from all parts of the country, representing more than two million dollars of industrial capital, gathered at the Institute early in September. It was the fifty-fifth convention of the American Chemical Society. The association membership, numbering more than ten thousand, represents about one third of the chemical experts and manufacturers in the United States, and probably includes the majority of 10,000 chemists who have been enrolled and classified by the National Council of Defense.

All of the meetings were held in the Massachusetts Institute of Technology, the buildings of which have been placed at the disposal of the society. The programme which was arranged by the northeastern section, was of a simple nature, principally dealing with the scientific and technical features of the many branches of the industry, which includes such a wide range of products as baking powders, drugs, explosives, fertilizers, gas, greases, inks, oils, soap, and various pure and recovered chemicals and acids.

The meetings showed the important part played by industrial chemistry in modern war-fare and the accounts of the way in which chemistry has served the warring nations provided stimulating material for discussion.

Among those prominent in the convention were Professor Henry P. Talbot, '85, Arthur D. Little, '85, and Professor Robert S. Williams, also of the department of Chemistry at the Institute.

BOOK REVIEWS

THE MODERN MILK PROBLEM IN SANITATION, ECONOMICS AND AGRICULTURE.
By J. Scott MacNutt, Lecturer on Public Health Service, Massachusetts Institute of Technology; Author of "A Manual for Health Officers." Cloth; 258 pp.; illustrated. \$2. The MacMillan Co., New York, 1917.

In this work the author reviews in a concise and impressive manner the various factors entering into the modern milk problem. The economic and sanitary factors are opposed, and the problem consists in the difficulty of securing a safe and good product at a moderate cost. The writer offers no sovereign remedy but attains the first step in the solution of any problem by precisely stating just what the problem is. Among factors offering a solution there is the recent discovery that expensive barns and milk houses are mistakes, and also the present score cards based on their supposed necessity. Ninety per cent. of perfection in milk depends solely upon cleanliness in milking, the use of small mouthed pails, and proper cooling and handling in absolutely sterile utensils. Other agencies in the solution of the milk question include the establishment of coöperative farmers' milk-depots in the country for control, handling and shipping of the milk supply; the grading and labelling of milk, so that the public gets what it pays for (as in New York); and the consolidation of milk distributors in the city to avoid duplicating milk routes all over the town. The writer closes by making general suggestions in respect to the proper conduct of health and agricultural authorities, legislation, farmers, dealers and consumers which he affirms would aid in the final solution of the milk problem. Various matters of practical importance are to be found in an extended appendix. The book is not designed for any special class of readers but for health officers, inspectors, dairymen, dealers, farmers and all interested in the subject. It is a sane, sound and worthy presentation of an important matter.—Winslow.

MRS. HOPE'S HUSBAND. By Gelett Burgess. Illustrated by Henry Raleigh
New York City: The Century Co., 353 Fourth avenue at Twenty-sixth street.
Price, \$1 net.

Frank Gelett Burgess, the author of this interesting novel, and of "A Little Sister of Destiny," was born in Boston in 1866, and graduated from the Massachusetts Institute of Technology in 1881. He has lived in San Francisco, London, Boston and New York City, and is a member of the Bohemian Club of San Francisco and the Players' Club of New York City. He has won recognition as a master of light verse and entertaining short fiction.

STATE SANITATION: A REVIEW OF THE WORK OF THE MASSACHUSETTS STATE BOARD OF HEALTH. By George Chandler Whipple, Professor of Sanitary Engineering in Harvard University and the Massachusetts Institute of Technology; Member of the Public Health Council, Massachusetts State Department of Health. Vol. 1. Cambridge, Mass.: Harvard University Press. Cloth; 6 x 9 in.; pp. 387; 11 plates and 8 text illustrations. \$2.50.

In sketching the history of the Massachusetts State Board of Health for nearly half a century, drawing word pictures of the leading members and officers

of the board, and presenting abstracts of the most notable of the board's publications, Professor Whipple is rendering a notable service. The pleasurable task he is doing so well is one for which he is well qualified through long acquaintance with members of the board and of its staff and through service on the Massachusetts Public Health Council since 1914.

The present volume, which is the first of three to be devoted to the subject, is in two parts. Part I, first sketches the early history of public health work in Massachusetts to the beginning of the board in 1869. It then outlines the history and the work of the board and its divisions, including the world-famous Lawrence Experiment Station for the study of water purification and sewage treatment and the engineering work of the board. There is also a chapter of biographical sketches; a chapter on the State Department of Health, 1914-16, and one on state sanitation in general.

Part II is an able condensation of the lengthy "Report of the Massachusetts Sanitary Commission of Massachusetts" which under the leadership of Lemuel Shattuck worked out a detailed plan for a "sanitary survey" of the state—really a scheme for state and local health work. This report, published in 1850, recommended that the proposed State Board of Health include in its membership "a civil engineer" and "a chemist or natural philosopher," thus with prophetic vision forecasting the brilliant and efficient work that was to be done in Massachusetts by engineers, chemists and biologists.—*Engineering Record*.

For his contribution to the education of the people at the present juncture, Professor Charles-E. A. Winslow, whom Technology is proud to class among its alumni, has written a little volume, "Handbook of Health in War and Peace, a Manual of Personal Preparedness." The motif of the book is that health today as never before is a national duty. By health, Dr. Winslow does not mean merely freedom from acute sickness, but the possession of full vigor and vitality and power. It is possible much more than we realize, to maintain individually whatever standard of physical efficiency is wished, and if this is not maintained it is because the individual does not understand what he can do, or, in the plethora of indulgence, does not care. The country is entered upon a war and in this success demands the coördinated individual efficiency of the whole people, an efficiency that rests on health.

Professor Winslow has collated the foods and makes evident that economy may be exercised in the selection of the diet. Corn meal and oat meal cost only about one-tenth as much as beef and one-twentieth, roughly speaking, as much as turkey. But he is careful to set forth the needs of a balanced ration because certain foods may be set down as fuel for the human machine, while others are body builders. The latter requires protein, while the energy producers are among the hydrocarbons, which include fats and oils, and the carbohydrates, which include sugars and starches. Ten to fifteen per cent of protein is essential in the diet and those who fail to get this live with diminished vigor.

From Lusk, who has discussed the question of nutrition, Dr. Winslow selects certain items and one of the interesting ones is a dietary for a family of five, which includes no meat, and figures to \$1.16 a day for the whole. A sample day only is given, but there is doubtless a good variety that such a family, father at work and mother caring for the home, can evolve once the suggestion is made to them.

Following the example of his teacher, Dr. W. T. Sedgwick, Professor Winslow

emphasizes the food value of second grade foods, and their usefulness, if they are sold as such. It has been the American custom to use only the highest cost foods and to neglect or waste the others. Skim milk, for example, is a valuable food product which should be sold freely if properly labelled, while butter substitutes are on the market, of quite as great food value at only half the price, but restricted by unwise requirements. In these matters it is essential for the purity of the products to be beyond question, and the labelling to be frank and true.

Dr. Winslow has further added to the important literature of the day in sanitation by the making and publishing of a health survey of the city of New Haven. In this he has been helped by James C. Greenway and D. Greenberg of the Yale School of Medicine, the publication being possible through the Anna M. R. Lauder Foundation. It is a notable work in which the city has a chance to see itself as in a mirror, which presents a reflection true to the original. Some important improvements are suggested, one of which is the raising of the amount available for health purposes from \$40,000 to \$74,000, the latter figure being about that which authorities consider should be spent to secure good results. Some of the suggestions include the supplementing of the present housing regulations by improvements tending to better lighting and ventilation. A beginning has been made by the Improved Housing Association which is worthy of extension.—*Boston Transcript*.

Based on his long experience, wide observation, extensive reading and deep reflection, Dr. George F. Swain, Gordon McKay Professor of Civil Engineering in Harvard University and Massachusetts Institute of Technology, has written an interesting pamphlet on "How To Study." (New York: McGraw-Hill Book Co., 25c.) The book is addressed primarily to college students and their instructors, but in interest and possible helpfulness it is far broader.

BUSINESS LAW FOR ENGINEERS. By C. Frank Allen. New York: McGraw-Hill Book Company, Inc. 1917.

For an engineer to achieve a position as one of the directing class in the business world it is not enough for him to possess sound technical knowledge, not even if he has the personal qualities which are essential to leadership in modern group-labor industry. He must also possess broad administrative experience based, if he has been so fortunate, upon a proper academic training for business management. It is therefore an encouraging development in engineering education that Technology has undertaken what may modestly be described as at least a promising experiment of providing a coherent, balanced curriculum for students who aspire to become business executives in those industries whose success is largely dependent upon applied science.

It is particularly students of engineering administration and engineers whose work is not confined to exclusively technical matters who will be most helped by Professor Allen's recent book on Business Law for Engineers. Of course it is no more possible in the complex industrial society in which we live to make every business executive his own lawyer, than it is to make him his own skilled accountant. The very fact, however, that business has become progressively more complicated makes it increasingly necessary for the business executive to be intelligent, though not necessarily expert, with respect to every important factor that enters into business transactions, and certainly the rules of the game prescribed by the law should

not entirely remain a closed book to him. An adequate understanding of those rules of law that have frequent and direct application to the conduct of his business enables the business manager to escape not a few pit-falls. Moreover, it leaves him with such a strong impression of the complexities of the law that it does not require hard experience to teach him how desirable it is in every business situation that is at all unfamiliar, to seek capable legal advice before, rather than after the event, and it puts him in a position whenever it may be necessary, to work with lawyers intelligently.

To present the fundamental principles of so broad a subject as Business Law in a way which will be helpful and not misleading to readers without any special knowledge of the law is indeed a formidable task. No one who has not attempted it can appreciate the difficulty of writing an intelligent, and yet compact treatise, on more or less detached parts of many different fundamental topics. The selection, exclusion, emphasis, and juxtaposition of topics present problems which call for the exercise of wide knowledge and well-balanced judgment. Moreover, in this country the multitude of independent jurisdictions makes, as someone has said, the question "What is the law?" one which cannot be answered except with fifty tongues speaking at once. As was to be expected, Professor Allen's book grapples with these inherent difficulties of his subject in an open-eyed, careful and honest fashion. The author has not been content merely to repeat time-worn, and often dangerously vague, general propositions. His book gives evidence of independent thinking in stating legal principles, and in exemplifying the application of these principles in the more common activities of engineers. It is a pleasure to add that this treatise is a veritable mine of practicable suggestions for engineers, especially the chapter which discusses "The Engineer's Legal Relations with Others," and the seven chapters which treat of "Contract Letting."—Lincoln F. Schaub.

Stone & Webster to Build Depot in France

Technology men will be interested to know that the firm of Stone & Webster, of Boston, have been given the contract for the construction of a tremendous Ordnance Depot and Arsenal of Issue and Repair in France on a cost plus ten per cent. basis. The total cost including equipment is estimated at not less than \$100,000,000.

The contract was to have been placed in the hands of French firms, but the official French commission which was recently in this country did not endorse the proposal, on the ground that every man employed in the work would mean the taking of so much support from the front.

Ten thousand Americans have been enlisted for this work of construction and they are now awaiting transportation arrangements. All raw materials and machines will be sent from this country.

NEWS FROM THE CLASSES

1868.

ROBERT H. RICHARDS, *Sec.*, 32 Eliot Street, Jamaica Plain, Mass.

The class has lost one of its most noted members in the death, on September 23, of Robert Swain Peabody, senior member of the firm of Peabody & Stearns, and member of the Corporation of the Institute.

Mr. Peabody was born in New Bedford on the 22d of February, 1845, a son of the Reverend Ephraim Peabody, D.D., who was called to the ministry of King's Chapel in 1846. The family home was at that time transferred from New Bedford to Chestnut street, Boston.

Robert Peabody was prepared for college at the Boston Latin School, entering Harvard with the class of '66. Soon after graduation he began the study of architecture with Gridley J. P. Bryant, then at the height of his fame, and also entered the architectural classes at the Institute, under the instruction of Professor William R. Ware. Professor Ware at about that time established the firm of Ware & VanBrunt, which, it is of interest to note, was the first entering wedge of prominent architectural firms into Boston.

Robert Peabody at a later period, after further years of study in France, at the École des Beaux Arts, and in England returned to Boston to become associated with John G. Stearns in an architectural partnership, which endured until his death.

This firm during its long and successful period of business life took part in the construction of many splendid buildings throughout the country. Among these one thinks with civic pride of the Boston Custom House tower, the Exchange building and Fiske building in State street, Simmons College, Wentworth Institute, Hotel Bellevue and in the earlier days the Providence station, now torn down.

Mr. Peabody did not confine himself wholly to his profession, and all public interests lay close to his heart. As dock commissioner he made a trip to Europe, and upon his return wrote a report indicative of a remarkable industrial sense, entitled "How the Kaiser Would Develop a Port Like Boston." As park commissioner he rendered service of the greatest value to the present and future generations.

His success in his chosen profession is attested by the fact that he served as president of both the American Institute of Architects and the Boston Society of Architects.

He is survived by his widow and three children.

A tribute from the pen of Ralph Adams Cram is printed elsewhere in this issue.

1872.

C. FRANK ALLEN, *Sec.*, 88 Montview Street, West Roxbury, Mass.

Edgar Upton is "doing his bit" in his own way, near Boston, without making any fuss about it.—Arthur Farley has two sons in ambulance service over there "somewhere"; if he knows just where he is luckier than most people.—Arthur Sawyer is now in New York City after spending several years on the Pacific Coast, and a short time in Hawaii.—Charlie Hunt also spent a short time recently on the Pacific Coast, but is in Boston again, employed by one of the down-town trust companies, and sleeping in Allston.—The secretary himself has finally put on the market his book on "Business Law for Engineers" but still finds enough with which to busy himself, and so far has no big chunks of leisure although on the retired list.

1875.

EDWARD A. W. HAMMATT, *Sec.*, South Orleans, Mass.

John Harding Page Hughart, son of William Oden and Sarah Mahon (Page) Hughart, was born at Pittsburgh, Pa., December 1, 1854, and died at Grand Rapids, Mich., August 16, 1917. His early education was in private schools, and he was a member of the class of '75 during our first, and a part of the second year, leaving in November, 1872. He was employed in the Auditor's office, Union Lines, Pittsburgh; and in the Ormsby Iron Works. In 1874 he became connected with the Grand Rapids & Indiana R. R., as secretary to his father, and has been associated with that road ever since. He married Mary Morrison on April 27, 1892, and they had four children.

The following is from a Grand Rapids paper:

J. H. P. Hughart, president of the Grand Rapids and Indiana Railway Company, died shortly after 9 o'clock Thursday morning at Blodgett Hospital of injuries to his spine received in a fall downstairs at the home of his brother, W. O. Hughart, Fulton street and Lafayette avenue, E. His death removes from Michigan one of its leading citizens and from the Middle West one of its best known railroad men.

The accident which resulted fatally for Mr. Hughart occurred about 9.30 Tuesday night when he walked into an open stairway at the rear of the hall on the second floor of his brother's residence and, losing his balance, fell to the bottom of the steep staircase where he lay unconscious until servants came to his aid.

Dr. R. J. Hutchinson was hastily summoned and advised immediate removal of Mr. Hughart to the hospital, where he regained consciousness, although still suffering considerable pain from an injury to his spinal cord which caused paralysis from his hips down.

John H. P. Hughart had been a resident of Grand Rapids more than forty years and during all that time he was a familiar figure in business and social circles, an active factor in the city's growth and in its business and industrial development.

Mr. Hughart was born in Pittsburgh, December 1, 1854. His father, the late William O. Hughart, was one of the pioneer railroad men of the country and one of the earliest telegraphers. The father was elected president of the Grand Rapids and Indiana in 1874 when Grand Rapids was its northern terminus. A year later he brought his family to this city.

J. H. P. Hughart was educated in the eastern schools with a course at the Massachusetts Institute of Technology and in 1874 entered upon his life work as secretary to his father. Later he was paymaster, then secretary of the company and assistant to his father and upon the latter's death in 1899 he was made general manager. Three years ago he was elected president.

In recent years he was in ill health and the active management of the road devolved upon William B. Wood while Mr. Hughart retained the executive office and membership on the board.

During the many years of his connection with the Grand Rapids and Indiana the road was built to Mackinaw, and the Traverse City and the Muskegon branches were built, and from an almost unbroken wilderness northern Michigan has developed into one of the richest and most prosperous agricultural districts in the country with many prosperous cities and rapidly growing industrial interests. The wonderful changes that have taken place in northern Michigan have been due largely to the Grand Rapids and Indiana Railway and to the impetus its progressive management gave to enterprise.

Mr. Hughart had held high rank in Masonry. He was a past commander of De Molay Commandery, Knights Templar, past master of York Lodge, A. F. and A. M., and first president of the Past Commander's Association.

He was a member of the De Witt Clinton Consistory. His father was one of the founders of Westminster Presbyterian church and his son retained his interest in the same church. He was president of the Michigan Railway Association and for the last two years was an active influence in shaping railroad legislation in the State.

The death of Mr. Hughart was announced at the Grand Rapids and Indiana general offices just as the heads of departments were assembling in the office of General Manager Wood for a conference.

Many of those present had been associated with Mr. Hughart all their lives and liked him for his kindly ways. The meeting was adjourned after expressions of sorrow had been made.

Mr. Hughart is survived by a widow and four children, J. H. P. Hughart, Jr., a cadet at Annapolis; W. Oden Hughart III, Miss Polly Hughart and Miss Isabel Hughart, besides two brothers, William O. Hughart, Jr., and Oliver O. P. Hughart of Porto Rico, now in New York, and two sisters, Mrs. W. S. Howard and Mrs. George H. Penrose, wife of Colonel Penrose of Washington.

I notice that Miss Yvonne Stoddard, daughter of our classmate George A. Stoddard, was married to Henry Reed Hayes, October 24, 1917.

1876.

JOHN RIPLEY FREEMAN, *Sec.*, Grosvenor Building, Providence,
R. I.

Charles R. Fletcher of Los Angeles, Cal., writes that he is too old for the trenches but old enough for the call of duty. He was one of an executive committee of three to organize a big demonstration honoring Lafayette Day, September 6, and made the address of the day. In part he said with characteristic humor and pungency:

When we were requested by the Lafayette national committee to organize the Los Angeles celebration a prominent Los Angeles man said, "The people are too busy planting potatoes, better give it up." I didn't look at it that way. If the kaiser, my schoolmate of 1877 in the University of Bonn, shot at a potato on that flagpole, I might admire his marksmanship; but the moment he or anybody fires on that American flag I am ready to fly at him like an eagle for a battle. I wrote the national committee that it could trust us to the end.

Strange as it may appear to some people, the true meaning of this Lafayette celebration is, to my mind, abundant optimism and permanent friendship. The war is on, the light is obscured. But my experiences in life have taught me that there is a dowry of grace in the ministry of pain.

Every electrical engineer who knows will tell you that in the electrical world we cannot get the higher electric light vibrations except by first going through the lower heat vibrations. It is God's law. And this principle runs through our political, social and business life in varied forms.

One of the lessons of a great surgical operation in 1906 and its attendant strain was that the high fog of the overcast California sky was my best friend; well folks grumble at it, but sick people thank God for His dull gray clouds. The gray clouds mean much to humanity.

Finally, in Luke 21:28, we are enjoined to look up. It is there written—"When these things come to pass, then look up."

I honestly believe that a wonderful era shall follow the present great conflict.

The friendship of America and France is inevitably permanent. We rejoice in this opportunity to recognize the friendship, and like the people of old at the Red Sea, hear and obey the words, "Go forward."

1878.

E. P. COLLIER, *Sec.*, 256 Summer Street, Boston, Mass.

Charles S. Eaton, whose death occurred at his summer home, at Marblehead, October 13, was born in the city of Lowell, July 4, 1856. After completing his education in the public schools of Lowell, he fitted for Technology at the Warren Academy at Woburn, and entered the Institute in the class of '78 in September, 1874.

Immediately after his graduation from Technology he entered, as partner, the firm of Merrill & Eaton, architects, in his native city. After a few years in this profession he dissolved his connection with this firm and went abroad, ostensibly for his health, but largely for the purpose of perfecting and registering an invention he had made,—a telephone cut-off. This invention he sold to the Bell Telephone Company. Soon after taking up the profession of architect he married Miss Ella Thompson, of Lowell, whose father was in the wholesale drug business in Boston, with whom shortly after his return from Europe he entered into partnership, at 63 Hanover street, under the firm name of Thompson & Eaton.

It soon became apparent to him that the soda fountain end of the retail apothecary business was one of its largest sources of profit, and acting on this idea he opened as an offshoot to the business a shop in the basement of the building, on the corner of Washington Street and Young's Hotel Court. This was in 1882, the enterprise starting on a very modest plan, the room, according to the writer's recollection, being not larger than three hundred square feet in area, if as much as that. "Thompson's Spa" was the name Mr. Eaton gave to his venture, and possibly there is no establishment of the kind which has become better known. From the modest beginning of the little corner basement supplying soda fountain drinks and candy has grown a business requiring two buildings and a host of employees supplying lunches to people daily.

It may be thought that a technical education was thrown away in this last occupation of Mr. Eaton, and no doubt his inherent aptitude for matters of detail and his thoroughness would have made him a success had he not received a technical education; nevertheless there is no question but that his four years at the Massachusetts Institute of Technology contributed largely toward making him the efficient business man he proved to be.

At the fiftieth anniversary of the founding of the Institute, when a call was made for exhibits from Technology men of inventions made by them, the writer called on Mr. Eaton's son to see if it would be possible to obtain some exhibit of his father's invention of the telephone cut-off. After acknowledging his inability to furnish such an exhibit Mr. Eaton added, "However, I believe the biggest invention my father ever made was Thompson's Spa." The truth of this statement nobody will gainsay, and the Massachusetts Institute of Technology has every reason to be proud of this product of the efficiency, industry and resourcefulness of one of its graduates.

James W. Rollins is contractor for the state dry dock now being built in South Boston. It is the largest dry dock in the world and will accommodate any ship now built or in process of design. Mr. Rollins has done a great deal of work in Boston one example of which is the dam on the Charles River just below the Technology buildings.

1879.

CHARLES S. GOODING, *Sec.*, 27 School Street, Boston, Mass.

Attention is called to a special article in this number of the TECHNOLOGY REVIEW under the heading "Technology Colors."

On October 1, 1917, Mr. Rogers, acting editor of the TECHNOLOGY REVIEW, sent a letter to all the secretaries of classes and local associations asking that the secretaries obtain from the classmates of their respective classes information as to what they are doing in relation to the war and forward the same to the TECHNOLOGY REVIEW to be published.

In accordance therewith your secretary sent out a letter to the classmates on October 9, requesting that they send information as to what they are doing in relation to the war, and in response to this letter the following letters from classmates have been received.

Wilson Eyre writes:

I am not doing any work for the Government, but with regard to the other matters, I have bought some Liberty Bonds, and I have contributed to the charities connected with the war—to most of them, and to the best of my ability. I have also sent many things to the front, such as books, magazines, tobacco, picture puzzles to the hospitals, and so forth.

I trust this will answer your question, and that you do not want the information any more in detail.

The following letter is from Henry G. Hall:

In reply to yours of 9th, I am Hooverizing and subscribing to Liberty Bonds to the extent of my ability.

By the time the class of '79 is called to the Colors the doctor will let me join.

Two of my boys are with the 101 Regiment U. S. F. A., in France and the other one is making munitions.

Vibe Spicer writes as follows:

Yours of 9th inst. received. This member of '79 is doing knitting and allied occupations, being deemed too young for the firing line or destroyer service, for both of which he made strenuous (and obviously ridiculous) clamor for the first months of our participation. Passing on back towards the woods, as directed by all to whom applications for a man's job were made, he got covered with tags, buttons, etc., by people who had them to sell: Liberty bonds, Red Cross, Navy League, National Security League, Boy Scouts, et cetera, etc., and some more.

The nearest to real service was two weeks as clerk on the Exemption Board and the making of knitting needles for the Red Crossers.

Incidentally war gardens have kept me sufficiently excited and the produce has netted a trifle in the way of premium on the cost. I have discovered that I own a back and several arms and legs which I would swap for a real good load of wood. In other respects, however, we are doing quite well.

I am on the eve of departure for several days, so you must make what you can of this.

Knapp writes:

Started Duxbury Committee on Public Safety. Have charge of the relief work and try to stir up and get more systematic the activities in other directions; also little tutoring of naval recruits.

Though strong and doing full work, considered too old (and presumably too feeble) to teach navigation, join engineer corps or be of other use in the service.

William S. Stearns sends the following letter:

Your inquiry of the 9th is at hand. You wish to know what I am doing in relation to the war. I am filled with a desire to assist in every possible way in the winning of the war. As I am sixty years of age I could not enlist and the assistance I am giving has been in the contributions of money.

After paying living expenses, every dollar I have is used in contributions for war work and the purchase of Liberty Bonds. I make no other investments. I do not care how high taxes get and, if I knew the bonds were to be repudiated, I would still buy them.

I contribute to the support of various war charities through organizations in New York. I believe that it is as essential to assist our Allies in caring for their cripples and orphans as it is to back up our army. They must not become discouraged.

As business in this country must be kept going, I suppose I am doing something in attending to business. If our work at home stopped the war would soon stop.

Fred M. Lane writes as follows:

I have two sons, both of the fighting age, the older being twenty-six, and the younger will be twenty-four next February. The older one gets married on the 15th of October. He probably would not do that except that he is employed in the Colt Machine Works at Hartford, Conn., and is working on Government contracts for machine guns, and other things, and expects to be exempted for that reason.

My other son is a first lieutenant in the Air Craft Division of the Signal Office, and is, therefore, doing his bit as conscientiously as any one.

I am president of the Allen-Lane Co. and a director in two mills, one of which is devoting practically every loom to the manufacture of army blankets, and the other mill is devoting about half of its machinery to the production of flannels and overcoatings. Some of our family have purchased Liberty Bonds, and there may be

some personal purchases on my own account before the war is over. I do not consider, however, that we are doing more than we should, nor are we doing more than a great many other families, and not nearly as much as some, and we are not disposed to brag about it.

The wedding I refer to is that of Miss Irene Leavens of 34 Lefferts Place, Brooklyn, daughter of Mr. and Mrs. Addison Leavens, to my older son, Alfred Page Lane.

The following letter was received from Arthur M. Waitt:

In response to your circular letter of the 9th inst., I beg to advise that in connection with matters affecting the war, I find myself at present quite busy, not in the military line, although I am subject to call for staff and advisory work in railway equipment engineering matters whenever my services are needed.

In the meantime I am working locally for the Connecticut State Council of Defense and the food administrator, and also through the Connecticut Chamber of Commerce of which I am a director, in creating an atmosphere and enthusiasm for the Second Liberty Loan, and also for the food conservation pledge cards which Mr. Hoover is about to send out for signatures and coöperation.

I am local director of the Food Committee of the State Council of Defense, and also a member of the local general committee of that council, and am trying to do my bit in my own home state and district, and stand ready to respond to any call from the War Department at Washington in connection with military service for which I am capable.

W. F. M. Goss writes as follows:

W. F. M. Goss, formerly dean of the College of Engineering, University of Illinois, now president, Railway Car Manufacturers' Association, 61 Broadway, New York, is a member of the Engineering Committee of the National Research Council, Council of National Defense.

Phil Little writes the following letter:

In answer to your call for help regarding war work I will see if I can list my mild endeavors.

In the first place I was left out as regards military work although I volunteered my services. Polite replies were all I received. Age something to do with it, I imagine! Here goes:

Chairman, Artists Posters Committee, Boston Public Safety;

Chairman, Massachusetts Committee National Arts Club, New York American Artists War Engineering Fund;

Several pictures and etchings sold at various fairs, bazaars, etc.;

Two Liberty Loan large oil posters;

Several newspaper cartoons;

Designs for color schemes, Navy Department Camouflage, of low visibility painting of submarine chasers or other vessels.

Painted my own 42-foot gasoline launch same way and pictures have appeared in public prints of same.

This seems at present about all I have been able to do. Severe and dangerous illness in family for past year has prevented very active work on my part.

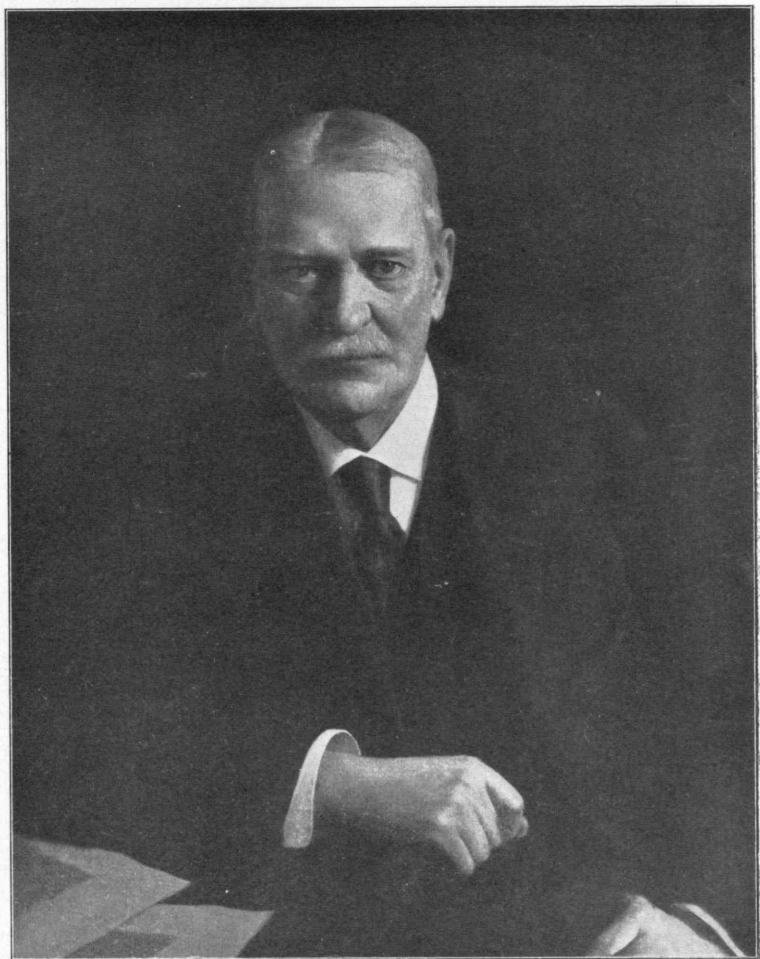
Alfred B. Harlow writes the following letter:

I have just received your letter of the 9th asking for items of war work. I haven't much to say.

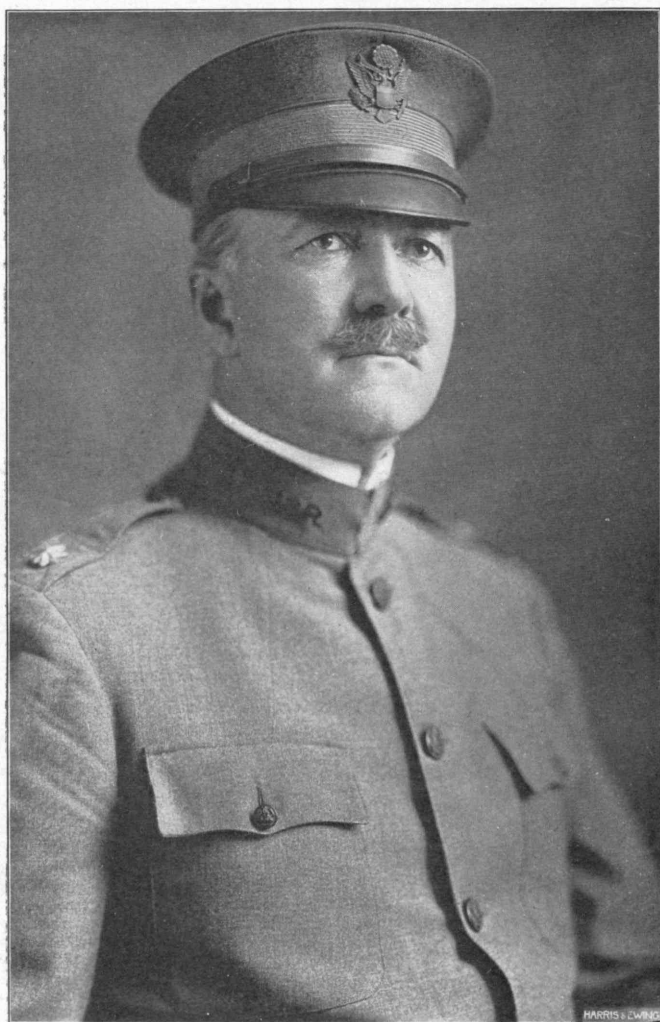
I have a son, Alfred G. Harlow, second lieutenant, Camp Meade, Maryland. I have a son-in-law in Minneapolis, Minn., working hard for the war loan—one of the four-minute speakers. Mrs. Harlow and I are buying all the Liberty Bonds we can manage.

For an old chap of '79 this is about all that I can do and not of much interest to the REVIEW, but I felt that all your efforts for the class should be recognized and appreciated.

With best regards.



ROBERT SWAIN PEABODY, '68



MAJOR HENRY SOUTHER, '87

Photo by Harris & Ewing, Washington, D. C.

S. Homer Woodbridge writes as follows:

I have just come upon yours of the 9th inst., laid away for "a more convenient season" and forgotten.

My activities in behalf of our country in this war are thus limited to the contribution of an only living son, Harvard '17, to active efforts toward increasing the membership of such associations as the Navy League, the American Defense Association, and some work through the press, also aiding the Liberty Loan work—all in a quiet but, I trust, useful way. I am hoping to find a larger "sphere of influence" as the war progresses and the force to man home industries and to fill gaps become more reduced than it is today.

Your secretary has been employed in work relating to munitions, time fuses, submarines, and safety devices for vessels; has carried on a war garden, subscribed for Liberty Bonds, contributed to different charities and has two sons-in-law in the State Guard.

The following notice of Professor H. Langford Warren's death was published in the *Boston Transcript*, June 27, 1917:

Professor Herbert Langford Warren, for years a member of the faculty of Harvard College and head of the department of architecture, died today at his residence in Garden Terrace, Cambridge, at the age of sixty years. His death was sudden and followed a brief illness which had confined him to the house only for the past week, and which had not caused his family to feel that its outcome would prove fatal. He seemed to be in his usual health on the completion of the recent term at Harvard. His last important work there had been the supervision of the construction of the Germanic Museum, carrying out the plans of the architect of the building, Bestelmeyer, who was called abroad just before the outbreak of the present war in Europe. Mr. Warren had given the work of construction his personal authority and oversight.

Professor Warren, was born in Manchester, England, on March 29, 1857, the son of Samuel Mills Warren and Sarah Anne (Broadfield) Warren. In the early seventies, he studied at Owens College in his native city, Manchester, and, on coming to the United States, he entered the Massachusetts Institute of Technology, taking a course there in 1877, 1878 and 1879. He later studied architecture in the office of the late H. H. Richardson, the Boston architect, with whom he remained for several years.

After taking a special course at Harvard, Mr. Warren went abroad as a traveling student in Europe for a year. On his return he was made a member of the staff of the city sanitary engineer in New York, but later returned to Boston and was a member of the firm of Warren & Smith. In 1893 Mr. Warren became instructor in architecture at Harvard and a year later was made assistant professor there and since 1899 he had been a professor.

Mr. Warren had been president of the National League of Handicraft Societies and a member of the Society of Arts and Crafts, Boston. He was a fellow of the American Institute of Architects, of which he was for several years a director, and belonged to the Boston Society of Architects, which he served as secretary, from 1891 till 1895; also of the American Academy of Arts and Sciences and the Archaeological Institute of America.

Mr. Warren was married on November 8, 1887, to Catherine Clark Reed of Boston, by whom he is survived. He leaves also two daughters, Miss Winifred B. Warren and Miss Hilda Warren, and two sons, Arthur B. Warren and James R. Warren. There are two surviving brothers, Harold B. Warren of Brookline and John B. Warren of Boston, as well as a sister, Mrs. F. M. Billings of New York.

1881.

FRANK E. CAME, *Sec.*, Montreal Apartments, Westmount, Montreal, Quebec.

FRANK H. BRIGGS, *Asst. Sec.*, 10 High Street, Boston, Mass.

J. S. Rogers has volunteered his services to the Food Administration.—Godfrey Cabot is president of the Aero Club of New

England, which with the Harvard Aeronautical Society and the Aeronautical Society of Pittsfield, Mass., is a member of the Aero Club of America.

1882.

WALTER B. SNOW, *Sec.*, 136 Federal Street, Boston, Mass.

In connection with the report of Harry Manning's death given in the July issue, the secretary promised extracts from his recent correspondence. Here they are, full of Harry's old-time enthusiasm, making us realize how much we miss him. The joy of his meeting at the Engineers' Club with a hastily gathered group of classmates in June, 1916, is reflected in the following:

I shall not forget your efforts on that Monday in getting such a good crowd of the boys together at the Engineers' Club. How I did enjoy it, every minute, and every time I think of it, I say I am out of the world too far to enjoy the really good things. It would appear that I am bound to stay in the West, away from my beloved salt water, beautiful sails, and New England scenery. I tell you, Walter, I miss it, and every time I go on, it is harder to come back. I see no way out of it, so I'll have to look at the muddy Monongahela, Allegheny and Ohio rivers, and "just pretend" I am out on Massachusetts Bay.

In November, 1916, the secretary wrote him about the big annual dinner of *The Tech*, to the first numbers of which Harry contributed articles on the steam engine indicator, hence the following:

It surely brought us back to old times in going over the first editions of *The Tech*. I am afraid you would have to hunt hard to find my copies for after the movings and removings, misplacements and so on, due to thirty-four years, these things get out of your own hands no matter how carefully you put them away. But well do I remember those first editions of *The Tech*, especially the first and second and third, if I remember correctly. I certainly lugged those old indicators over the country to get the material for the articles. Mighty little did I dream of what I am doing (or supposed to be doing) this minute. The prognostications can certainly go upside down and then back again.

You will soon be at work trying to gather the gang together for another "feed," and I certainly wish your hand was long enough to reach from Boston to Pittsburgh, so that on the right date you could simply reach over and grab me from my desk and seat me with you around that table. Perhaps, in a year or two, I will be able to leave at noon by flying machine, dine with you and be back on the job in the morning just so I won't be docked a full day. No, we don't want that kind of a trip—want to stay longer.

1883.

HARVEY S. CHASE, *Sec.*, 84 State Street, Boston, Mass.

The secretary is acting as comptroller for the Federal Reserve Bank of the First District (New England) in handling the Liberty Loan accounts for both the first and second loans.

1884.

HARRY W. TYLER, *Sec.*, Mass. Inst. Tech., Cambridge, Mass.

New York papers reported during the summer the sale of du Pont's controlling interest in the stock of the Equitable Life

Assurance Society to the stockholders for \$2,000,000 less than he paid to the J. P. Morgan estate for it two years earlier. The stock is to be cancelled and the society made entirely mutual, completing a reform which has been recognized as urgently needed since the Armstrong investigation of 1906. Du Pont remains chief owner of the great Equitable Office Building at 120 Broadway. When he purchased the stock he stated to the state commissioner of insurance that his desire was that the mutualization of the society be brought about in order to give assurance that its affairs will always be managed in the interest of the policy-holders.

The *Troy Record* gives us the following news concerning H. G. Hammett:

Mayor Burns today announced the appointment of H. G. Hammett as a member of the Troy Dock Improvement Commission to fill the vacancy caused by the death of William W. Loomis. In making the announcement the mayor stated that he felt Mr. Hammett is the best fitted man in Troy for the position. Mr. Hammett, it will be recalled, was chairman of the preliminary committee appointed by the mayor at the direction of the common council to investigate the harbor and dock facilities of the city.

After a thorough investigation the committee made its report in March, 1916. Mr. Hammett has an advantage because of his exceptional acquaintance with the situation, and the mayor expressed the opinion that the city was fortunate in being able to secure the services of a citizen of this character. Mr. Hammett is past president of the Chamber of Commerce, a director of the Union National Bank and a manufacturer. The appointment is subject to confirmation by the common council.

Mr. Hammett has been active in urging the deepening of the Hudson river. He has made several trips to Washington for that purpose and has been a consistent advocate of an adequate channel before Congress at the Atlantic and Deeper Waterways Association convention.

F. F. Johnson of Boise, Ida., made a welcome call after visiting Washington for official business in connection with the new Liberty Loan and the Red Cross work in his state. A small group of classmates had the pleasure of lunching with him at the New Walker Memorial on October 2.

Rich was announced to read a paper in a recent convention at the Somerset, but inquiry there remained unanswered, so it is to be feared that his paper was read only "by title."

A card just received from Chase reports a 300-mile auto ride up into the wilds of the Rockies, with glimpses of deer and elk.

An explanation is suggested by the following extract from a North Adams (Mass.) newspaper:

After a continuous service of twenty-seven years at Arnold Print Works, R. L. Chase, manager of that establishment, has resigned. Mr. Chase, who is regarded as one of the most capable men in the print cloth business, has long been prominently identified with the industry and has exceptional experience and training in the work. He is a graduate of Massachusetts Institute of Technology and, after an experience of seven years in the business of cloth printing, he came to this city from Philadelphia. When he came, there were but eight machines at the local plant doing ordinary calico printing. During his connection with the concern, the number has increased until there are twenty-four doing this work, which includes the finest kind of silk and cotton goods, in a manner not surpassed in this country or abroad.

Mr. Chase in connection with his duties has made several trips abroad and has visited all the leading print works of England and Europe including the famous works at Mulhouse. He has also had the exclusive control of the drapery end of the business, soliciting this work in New York and Boston, and under his management this has grown from a very small beginning to a large percentage of the output.

Mr. Chase is a member of the Society of Chemical Industry of London, being a member of the executive committee of the New England branch of the society. He is also a member of the Société Industrielle de Mulhouse, there being but very few in this country having such membership, also of the Chemists' Club of New York, as well as a member of various other societies and organizations. He has a wide and extensive acquaintanceship among the print works fraternity. He will take a well-earned rest before engaging in any new activity.

Mr. Chase commanded the respect and liking of the print works employes in a marked degree, and the announcement of his resignation was received with general regret, especially among the older men who have been associated with him. In his long service he has earned the reputation of frank and fair dealing with all those working under his orders. His activities have been confined almost entirely to his work. He has never held nor sought any public office in the community, contenting himself with fulfilling his obligations as a private citizen.

1885.

Everett Morss, at present a member of the Executive Committee of the Institute, has recently been appointed a member of the priority committee of the Council of National Defence. Mr. Morss is widely known and has been connected with the Simplex Wire and Cable Company for thirty-two years. The priority committee consists of seven members of the Council of National Defence and will decide what tasks are to be first accomplished by the council. Mr. Morss has left Boston to take up his new duties in Washington.

Dr. H. P. Talbot has been appointed by the Secretary of War to investigate the matter of defective ammunition sent to the American expeditionary force in Europe. The House Military Sub-committee continues its inquiry into the manufacture of defective cartridges at the Frankford Arsenal. Major J. E. Monroe, chief inspector of small arms ammunition at the Frankford Arsenal, testified that 8,000,000 cartridge primers had been condemned since the defective primers had been discovered in the arsenal's output.

Recently the Alumni of Technology presented I. W. Litchfield a purse of \$3,320 as a token of their appreciation and esteem of the efficient work accomplished by him. Mr. Litchfield, or as he is better known, "Ike," is probably one of the most active members of the Alumni of Technology, which is conceded by all to be the strongest and largest active graduate organization of any college in the country. The organizing and bringing together of the Technology graduate associations in different cities is due entirely to the labors and efforts of Mr. Litchfield. His greatest achievement was the planning and managing of the 1916 Reunion. It was through his efforts that he was able to get the various alumni secretaries all over the country to communicate with him and help

him in his huge task. As a part of this work, a paper called the *Pantechnicon* was published under his direction. The purpose of this publication was to get in touch with the graduates of the Institute and give them an idea of what they would see when they arrived in Boston. All of the details of the Reunion were under his general supervision, and no noticeable hitch occurred in carrying out the extensive program.

Mr. Litchfield's connection with things pertaining to Technology does not end here, for he was for some time editor of the *TECHNOLOGY REVIEW*. He began his editorial education as one of the editors of *The Tech*. Mr. Litchfield's efforts to bring the graduates of Technology together have been largely responsible for the generous manner with which the alumni have responded in the past to the various appeals for funds.

A committee of thirty-five men with C. A. Stone, '88, as chairman, and E. C. Lufkin, '85, and L. E. Gardner, '98, as treasurer and secretary respectively, was formed to recognize in some way Mr. Litchfield's splendid service to the Institute, and a sum of \$3,320 was then raised among the alumni which was presented to him as a measure of their appreciation. Mr. Litchfield is now in Washington assisting the government in the choice of Technology men for the service of the country.

1886.

ARTHUR GRAHAM ROBBINS, *Sec.*, Mass. Inst. of Tech., Cambridge, Mass.

Ensign Edward E. Higgins, connected with the Coast Defense of Connecticut, died June 20, 1917, from cerebral meningitis induced by over work in the service of the government.

1887.

EDWARD G. THOMAS, *Sec.*, 360 Rockingham Street, Toledo, Ohio.

The secretary has to record in this issue with very deep regret the death of three men of our class, Stewart, Souther and Cobb, the most extensive break in our ranks which has occurred in recent years.

Norman Quint Stewart was born in Everett, Mass., September 6, 1865, and received his early education in the Everett schools. He spent three years in the mining course at the Institute with '87, after which he entered government service as a surveyor in the public land service in California and other states. On returning to the East he became a partner in the business of his father, one of the pioneers in the coal business in the vicinity of Boston. Stewart continued to be connected with the handling and distribution of coal in Boston to the end of his career and was well

and favorably known to all connected with the industry. As he was not robust, Stewart found the variable climate of Boston a trying one and was forced to spend many years at southern points, especially Pine Bluff, N. C., where he served a term as mayor. His business interests caused his return to Boston where he had recent association with the Metropolitan Coal Co. For two years he was rapidly failing in health and spent much of the time in St. Petersburg, Fla., in the care of his devoted wife, but his death, which he met with characteristic courage and patience occurred at his home in Everett, Mass., August 3, 1917.

Stewart was a most likable fellow, making strong friendships and popular with all. In '87 affairs he was greatly interested, and never was missing at our functions except where distance rendered attendance out of the question. He was married May 1, 1895, to Miss Lillian M. Morgan at Somerville, Mass., who survives him. He was a member of the First Congregational Church, Palestine Lodge, A. F. & A. M., the Royal Arch, Boston City, Congregational and Technology clubs.

Henry Souther, major in the Officers' Reserve Corps, Aviation Section, and head of the Aircraft Engineering Division of the United States Army Air Service, died at the Post Hospital, Fort Monroe, Va., on August 15. He had been ill less than a week with an intestinal disorder, which, because of sudden complications forced an operation from which he did not rally. It is believed that the assiduity with which he had applied himself to the very important work which had been placed in his charge resulted in overtaxing even his remarkable strength.

Souther was born in Boston, September 11, 1865, passed through the Boston schools with honor and entered the Institute in 1883. He chose the mining course, in which he proved a brilliant scholar, and graduated in 1887. He married in 1888, Elizabeth Sherman, daughter of the late Judge Sherman of the Massachusetts Supreme Court, and two daughters, Catherine and Mary, were born to them. After post-graduate work in metallurgy in Germany, he became associated with the Pennsylvania Steel Co. at Steelton, Pa. Later he went to Hartford, Conn., as consulting engineer for the Pope Mfg. Co., having charge of their very complete testing laboratory, very quickly becoming an authority on materials of every sort and making the first complete study of all the materials which entered into the bicycle. In later years he established a testing laboratory in Hartford for commercial work and broadened his consulting work to include many industrial plants. The building up of the automobile business afforded renewed opportunity for his knowledge and he was retained and consulted by many of the motor car makers. He was very conspicuously identified with the engineering societies which have grown to importance in the automobile field, and through his earnestness, strength of character and forceful presentation of his ideas was very largely respon-

sible for the molding of the helpful policy of these organizations. He was recently general manager of the Ferro Machine & Foundry Co. of Cleveland, a position which he gave up to accept the position of consulting engineer to the Aviation Section of the Signal Corps last year.

His very great experience in the bicycle and motor car development gave his service a unique value to the government, as his rapid promotion testified. He organized the inspection department and conducted many experimental tests. He was the first civilian to become a major in the Aviation Section, Officers' Reserve Corps, and was to have been raised to a colonelcy on the day following his death.

His professional hobby was "standardization" and to the value of his persistent work there is abundant testimony in the quotations which follow from the technical press. Souther, like many other busy men, gave much time to civic work and committee work in the various organizations in which he was interested. No man could be more loyal than he was to his Alma Mater and to '87. To every call made he responded with active interest, he was present at every dinner or other gathering of our class to which he could possibly arrange to come. To every '87 man, "H" will remain in memory as a cordial, warm-hearted friend and the cheery grown-up boy of our class reunions and no one will be more sincerely missed when we come together in the future.

Souther was a member of the American Society of Mechanical Engineers, the American Society of Testing Materials and the Society of Automotive Engineers. His clubs were the Racquett and Engineers' of New York City and the Hartford Club.

The Air Service Journal says of him:

The death of Major Souther is an irreparable loss to the air service for he was a man of experience, possessing a remarkable organizing ability in addition to scientific attainments of a high order. His loss will be felt with equal severity by the entire automotive industry, in which he took a prominent part. His distinguished career as an engineer made him one of the best known men in the profession. . . . He was one of the most active engineers of the country in promoting standardization and was the first chairman of the Standards Committee of the Society of Automotive engineers, becoming president of the society in 1910-1911. In his standardization work Major Souther had far more to do than act as committee chairman, for he had the task of convincing a reluctant industry of the value of standards. He has been characterized as the greatest salesman the standardization idea ever had. Far-sighted and clear-thinking, he could not only realize the importance of standards in manufacturing, but he was gifted with the ability easily to transfer his ideas to others.

The Journal of the Society of Automotive Engineers in a long article says:

The society had no better friend than Henry Souther. His work in the standardization of materials and in connection with parts was of vital importance in the automotive industry and stands as a monument to him. He was the exponent of standardization to the nth power.

This outstanding man was in many views the originator of the plan to inaugurate

intimate coöperative meetings of automobile engineers and was conspicuously identified with the remarkable pioneer activities of the mechanical branch of the Association of Licensed Automobile Manufacturers.

For many years he gave surprisingly close attention to details of the complex questions involved in the studies and meetings of the numerous divisions of the Standards Committee; from the beginning of the society's standardizing work, after the society had become the custodian of the mechanical standards of the Association of Licensed Automobile Manufacturers, to the time when the arduous duties of an executive position he had accepted prevented his giving the society committee work the attention he in conscience felt it demanded. He set a shining example for the successors to the honorary position of chairmanship of the Standards Committee. He established the work on such firm foundations, conducted it so wisely, and extended its scope to such an extent as to make the later great success of the S. A. E. Standards Committee possible. His policy was essentially one of driving ahead with the one thought of advancing the industry in a sound, commercial way by simplifying and coördinating vexatious questions involved in the design and production of mechanically propelled vehicles, by bringing to a standard many diversified questions of materials and parts which, for the good of all, speaking in general terms, should be solved in a concordant or identical manner, that the industry and the users should not have to bear the burden of the astonishingly great number of immaterial differences of specifications and dimensions of materials and parts.

Henry Souther was a big man. He held securely the admiration and affection of the members of the society. Distinctively fair-minded, he brought his remarkable judicial temperament to bear in straightforward fashion.

Major Souther's work while for the past year associated with the Aviation Section of the Signal Corps, first as consulting engineer, and later as major, United States Officers' Reserve Corps, was fundamental in character. From the very outset his foresight and imagination led to a conception of the vastness of the problem and to the evolution of an organization to cope with the work.

The activities at Langley Field, where design, experimentation and research in connection with aircraft development will be carried on, are to a great degree the result of Major Souther's grasp of the problems.

The multitude of specifications and other details whereon are founded production work now under way were largely the result of Major Souther's activities.

In the various divisions and departments of the Signal Corps which have now delegated to them the onerous burden of meeting the immense production program laid down, will be found many features initiated by Major Souther, upon which are built the structures of the present Signal Corps Air Service organization.

Major Souther will not be identified in the public eye with the aircraft production program which must be brought to a successful conclusion. It will, however, remain for his associates always to remember that the breadth and solidity of the foundation for the completion of this great problem, were in large measure due to the keen mind, tireless application, and that quality which attracts loyal support, which were but a few of the admirable characteristics of Major Henry Souther.

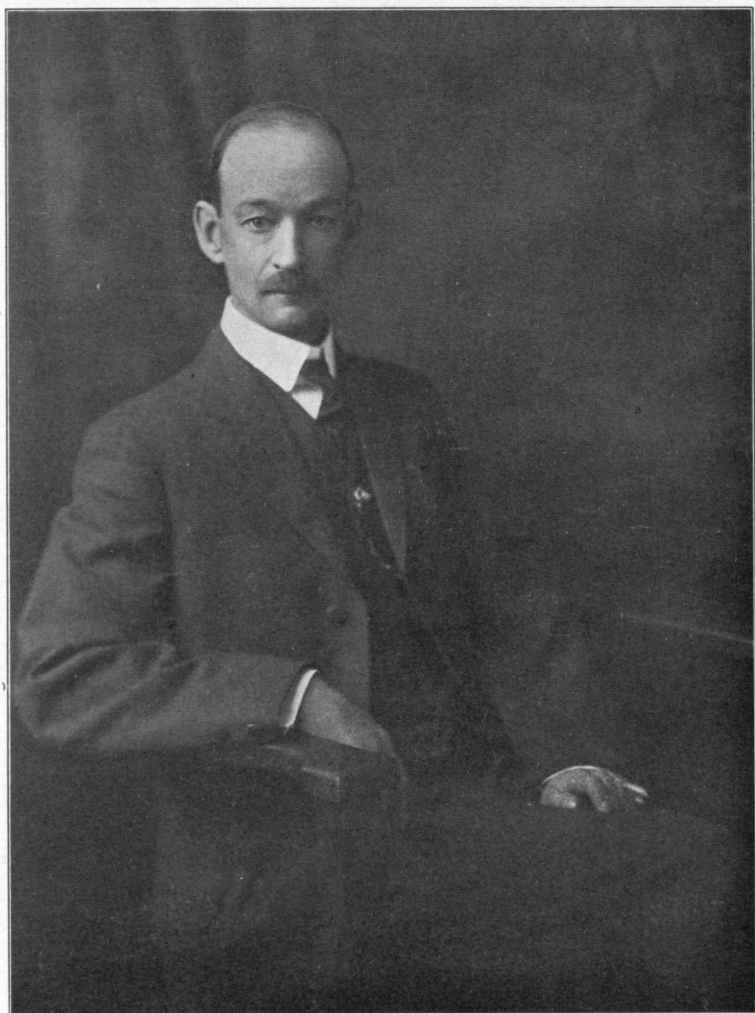
The records of the society bear testimony to Major Souther's grasp of the philosophy underlying engineering standardization. Many of his expositions of the problem seem even more apt today, in view of the broader standardization work in progress, than when they were first propounded.

Morton Eddy Cobb was fatally wounded by the accidental discharge of a revolver which he was showing to a party of friends at his home in Newton Centre, Mass., and died the next morning, August 17, 1917. The story and an account of his military career is told in the following excerpt from the *Transcript* of that date:

Two or three weeks ago, Captain Cobb, who had been a lieutenant colonel on the staff of General Whitney in the Massachusetts militia, held the position as secre-



MORTON E. COBB, '87



NORMAN Q. STEWART, '87

tary of the Committee of Public Safety, which he resigned to accept a commission as captain in the quartermaster's department of the regular army. Last evening he entertained a party of friends at his home, 170 Lake Avenue, Newton Centre, and after dinner proceeded to show them his collection of military trophies. It was while engaged in this that one of the revolvers was discharged, and he received the full force of the shot in his head. He was removed at once to the Newton Hospital.

Captain Cobb had long shown a deep interest in the National Guard of Massachusetts before he was commissioned in the United States Army. He enlisted in Troop A, First Squadron Cavalry, in 1895. He was later appointed to the staff of the Second Brigade, then commanded by General William A. Bancroft, and served continuously in various commissions under the successive commands of the late General Jophanus H. Whitney and General William A. Pew. His last assignment was as adjutant general of the Second Brigade. He was retired with the rank of lieutenant colonel in 1913.

Cobb was born in Newton, Mass., December 5, 1865, was a graduate of the Newton schools, and spent four years with '87 at the Institute in the mechanical engineering course. He did not follow a professional career but entered the financial and brokerage field, through his father's firm, Brewster, Cobb and Estabrook of Boston, and in his later work in insurance and brokerage, his attractive temperament and cordial good fellowship brought him, through his host of friends, his warranted success. Like his classmates, Stewart and Souther, whose deaths are here chronicled, Cobb was among those who, both from opportunity and desire, was active in our class affairs and constant in attendance and, like them, will be greatly mourned by '87.

Cobb was married, April 17, 1895, to Miss Mary Smith Byers, who survives him. They had no children.

He was a member of the Boston Athletic Association, the Exchange Club, Brae-Burn Country Club, Homestead Golf Club, Sons of the Revolution and the Society of Colonial Wars.

F. D. Carney is now chief metallurgist for the Bethlehem Steel Co. with headquarters at Bethlehem. He writes that his work is that of an adviser to the superintendents of their many plants on all questions of steel manufacture.

Thirty years is a long time to be either in or out, but '87 celebrated its thirtieth anniversary at Powder Point, Duxbury, Mass., on June 29 and 30 and July 1, 1917. As the secretary was not able to attend, he has to depend on a somewhat incoherent account of the gathering furnished by Taintor. It seems that Taintor, H. D. Sears and Spaulding went down Thursday to prepare the place for the bunch and spent the day and evening shopping in Plymouth for the supplies needed—though it's hard to understand what they could buy in Plymouth which would serve for an '87 gathering. All Taintor remembers of their purchases was a bottle of citronella—certainly a new idea for inducing conviviality. Friday, the gallant committee, still trying to provide something beside the citronella for the coming crowd, went fishing off Sequin, then went ashore on Clark's Island and cooked and ate the fish (probably

singular) they had caught. No statement is made of who was cook, but Sears is reported to have been fussy and objected to the flavor imparted to the bake by the several-weeks-old menhaden flakes attached to the board chosen for "planking" their fish. By Saturday morning "Squash" Cushing, Proctor, Draper, Bryant and Adams were added to the party and those to whom the high cost of living was an item again went to sea for their daily bread—or rather fish, while the "Gold Coasters" took their meals as far from camp as possible via automobile. The historian claims a catch of forty fish each day, which probably includes some sculpins.

By Saturday evening Lond, Merrill, W. H. Brainerd, Crosby and Very had appeared and all sat down to a delicious clam dinner which everyone thoroughly enjoyed; after which the meeting adjourned to Draper's room where he had his present pet, a blue Mexican dog, acquired during his service on the Mexican border as a soldier for Uncle Sam. This mascot proving popular, the rest of the evening was put in here, enjoying the citronella and other supplies. A lantern had been sent down from the Institute and a large number of lantern slides of old scenes and recent scenes in '87 reunions were shown. It was evident that if the '87 Battalion could be mobilized today as it appeared in front of Rogers Building in 1883, the war department would be relieved of considerable worry.

On Sunday a visit was paid to the Standish Monument and three of the party walked to its top, where they were well repaid by the charming view of the land of the Pilgrims spread before them. A clam bake on Duxbury Beach ended the reunion for most of the men and only Very, Sears and Taintor remained until Monday. Walter Fish joined the party on Sunday for the clam bake. So '87's thirtieth reunion was, like the many preceding, a jolly renewal of old and tried acquaintance, a bringing back of youth, and a feast of reminiscence. These infrequent meetings as our numbers grow less, become more seriously appreciated by the fortunate ones who can attend.

1888.

WILLIAM GAGE SNOW, *Sec.*, 24 Milk Street, Boston, Mass.

T. F. Laist, Chief Engineer of Bridges and Buildings, Division of Valuation, Interstate Commerce Commission, Central District, Chicago, Ill., has been commissioned major, Engineer Officers' Reserve Corps.—Ernest S. May is spending the winter in Boston and is located at 1066 Beacon street, Brookline.—Stone and Webster are building large arsenals in France and have many government contracts in their country.

1889.

WALTER H. KILHAM, Sec., 9 Park Street, Boston, Mass.

The secretary would be glad if members of the class would send in the names of their sons who are serving in the military or naval forces of the United States. A good beginning has been made by Hobbs, whose three sons are serving as follows: William H. is first sergeant of the Headquarters Company, 302d Regiment Infantry at Camp Devens, Ayer, Mass.; Marland C. is lieutenant, Company L, 104th Regiment Infantry, 52d Brigade, 26th Division, American Expeditionary Forces somewhere in France, and Franklin W., Jr., is an ensign with the U. S. Naval Reserve Forces, detailed for special work at the U. S. Naval Academy at Annapolis.—One of Thurber's boys is at the Plattsburg Officers' Training Camp and has already passed the examination for second lieutenant in the regular army, but has not yet been assigned a position. His second boy who is just under age, is not yet able to enter any training camp, but both were members of the Harvard R. O. T. C.—Clifford F. Crosby's address is now Salem End road, Framingham, or 27 Williams street, West Somerville, where he is established in the business of consultation work on heating and ventilating systems, plumbing, and layouts for utilization of exhaust steam from power plants by vacuum methods.—Ashton was married on June 8, 1917, to Miss Edna Spry of Boston. He is chairman of the Boston section of the A. S. M. E.—Whipple arrived home on October 21 from Russia where he went as a member of the American Red Cross Mission, which was in charge of Col. Frank Billings of Chicago. Whipple's rank was that of Major. He left Boston June 29, arrived Petrograd via the C. P. R. and Japan early in August. The object of the mission was to carry a message from the American to the Russian people, and to participate in the usual Red Cross work. While in Russia they came in contact with Kerensky and Korniloff and were for ten days at the western front, going to about 200 yards from the German trenches.—William S. Johnson died October 27, 1917, of a complication of Bright's disease and valvular disease of the heart. The funeral was at Saxonville, October 30, 1917.—On the invitation of the British Engineering Standards Committee, the American Institute of Electrical Engineers has sent over Mr. H. M. Hobart to represent the institute at a conference to be held with Sir Richard Glazebrook's Panel Committee on Standardization Rules for Electrical Machinery. Mr. Hobart is the author of several standard treatises on electrical machinery, and was for many years a lecturer at Faraday House Engineering College before he returned to America about ten years ago. He is decidedly *persona grata* to the engineers in this country, and a happier or more tactful choice could not have been made.

1890.

GEORGE L. GILMORE, *Sec.*, Lexington, Mass.

Schuyler Hazard has a Junior who enters Tech this fall, and we are wondering how many sons of the members of the class are already in Tech. Also, how many of you have sons in the service? Write to your secretary. Drop us a line and let us know.—C. O. Churchill's address is now 126 Fort Pleasant street, Springfield, Mass.—An article appeared recently in the financial papers giving lists of the number of directorships held by different prominent men. We note that Hayden is serving as a director in thirty-three companies.—The engagements were announced in September of the Misses Rosamond and Sabra Batchelder, daughters of our classmate, J. L. Batchelder, and a double wedding took place in October. J. L. is thus to be congratulated on the addition of two sons to his family.

The following letter was received from Lieut. John Balch Blood:

1. I enclose check for \$1.50 for subscription in "*Tech.*" Please send this to the address: Lieut. John Balch Blood, U. S. S. *Nebraska*, care of Postmaster, New York City.

2. You see I am still fighting for my country aboard the U. S. S. *Nebraska*, where I have been since mobilization on the sixth of April. I have been very busy, and while much of the work is getting well in hand, there is always plenty in sight to keep the working hours full. My job is first lieutenant of the ship, and it is practically in charge of the material of the ship, to keep everything in condition. The department as such is called "Construction and Repair." All new construction work, as well as repair, painting and cleaning comes under my view. Much of this work is the same as executive of a big manufacturing plant, or the engineer of an operating plant might have to do. From the material side it does not look very military, but everything has to be planned and done with reference to the military use, and so the military aspect is the main thread of everything.

3. I expect to have leave for a few days and will be around Boston August 12 to 16. Hope I may see you.

Hayden has been reëlected, as usual, vice-president of the Boston Stock Exchange.—While your secretary was on a fishing trip to Kennebago Lake, Maine, in September, we met a boy with his mother, and found that the boy was an officer in the British Army and had lost his father in the sinking of the *Lusitania*, had been badly injured himself, and also obliged to undergo a serious operation during the past winter and as yet unable to get back into the service. You can imagine our surprise when we found that it was the widow and son of our classmate, Arthur H. Adams, who was lost in that disaster. Mrs. Adams' home had been for a great many years in London, but for the present her address is Canaan, New York. She spent the last summer months at Marion, Mass., as the guest of Colonel Converse. William, the son, hopes soon to recover his health so that he can get back in the service.

The following letter has just been received from our classmate, W. P. Poland, who has been abroad for the past year and a half on

Belgian Relief work, and this letter was in reply to a letter of congratulations to him on having received the Cross of the Legion of Honor from the President of France for his bravery.

THE COMMISSION FOR RELIEF IN BELGIUM
3, London Wall Buildings,
London, E. C., 11th September, 1917.

G. L. GILMORE, Esq.,
Lexington, Mass., U. S. A.

MY DEAR GILMORE:

Thank you very much indeed for your exceedingly kind letter of July 26, which I should have answered before had it not been for a trip over to Holland.

The Cross of the Legion of Honor was much more a testimony of French courtesy and appreciation of all things American than of any special merit on my part. All our men have been quite as deserving of such distinctions but I happened to be the director and it was impossible for the President of France to honor everyone.

As you know, I was located in Belgium and France for about a year and have been for about the same time director in London. When Hoover took over the food control in the States, I became director for Europe and still hold that office.

I regret very much not to be with the French troops on the French front, but the feeding of these 10,000,000 people seems to be more important than any work I could hope for there. It is, in fact, wonderfully engrossing and appealing and, as you may imagine, is one long, fierce struggle to get food and ships.

We have some 2,000,000 people in France and 7,500,000 in Belgium, and try to import some 120,000 tons per month. The sufferings of these poor people over these three terrible years have been unspeakable; it does not seem possible that human nature could put up with what many of them have gone through.

With it all there has been a most magnificent spirit of hopefulness, courage and fortitude, and a wonderful appreciation of the efforts which are being made on their behalf.

Those of us who have been brought into direct contact with the brutality of the Germans and appreciate what the ideals of the German nation have come to be, recognize that no matter how terrible to the people of the United States the results of the war may finally be, not only our own national life, but world civilization depend upon German ideals being crushed and reduced to such a position that they can never dominate the world. We must be prepared to sacrifice everything if necessary to this end.

I am proud to see what a fine part the Institute is taking in the struggle and congratulate you all on what you have accomplished. Our men should be of almost inestimable value to the country in this great struggle and the Institute should justify itself now as never before.

Good luck to you and many thanks for the letter.

Yours sincerely,
(Signed) WILLIAM B. POLAND.

Have you subscribed to the Tech? If not, you are missing it. Get busy now. Send \$1.50 for six months or \$3.00 for one year to your secretary and you will not regret it. Three of our class are now across.

1891.

F. A. WILSON, Sec., Nahant, Mass.

The secretary does not know just where '91 stands on war service. Notice has already been given of Major Leeming. *The Tech* announces Morris Knowles as engineer of the Annapolis Junction Cantonment, and a letter has just come from him from

the office of Constructing Quartermaster at Camp Meade, Admiral, Md. H. S. Kimball is commissioned as captain in the Ordnance Reserve Corps—at last accounts. The secretary saw him about September 1, and he had not been called for service.

An enthusiastic letter from Mrs. Cunningham shows that she is practically a Technology person in spirit, activity and energy—wish there was some way of making her a '91 member in entirety. She is chairman in charge of the M. I. T. War Service Auxiliary which maintains a room in the Rogers Building. The purpose of this work "is to keep in touch with all Technology men in the service of the Government here and abroad, to establish helpful relations with families of Technology men who are absent from home upon federal or state service, to reinforce the work of the American University Union, and to provide and distribute supplies through a Technology workroom."

Cunningham's son, the class baby of '91, has gone across in a Massachusetts Field Artillery brigade. Last year he was on the border in the 1st New York Cavalry.

The town of Blythe, Cal., yields a letter from M. C. Wilkinson and a fine kodak of him and his bull pup—he, or the pup, a little ambiguity makes it hard to tell which, was at San Pedro in charge of field work on Fort MacArthur. He is now a farmer, which means one of those people who now demand all the money there is and a guarantee that there shall be sufficient labor for their purposes. Wilkinson says he once heard of the Bible, but that the event did not happen at Tech.

C. W. Ricker seems to be everywhere. A recent letter is from Havana where he is concerned in an Electric Railway Co. which also collects light and power. A recent clipping places him in Pittsburgh, or is there another Ricker? Speak up, Rickers!

Hartford has a new hotel. The *Hartford Daily Courant* says that Clarence E. Whitney got up on the table and took off his—coat—and went to work—he being more than any other one man the pioneer in this million dollar hostelry. It has a bar.

By the way our Jerry—Jerry Campbell, the old Scot—has a major's commission and is in France, or on the way. He is in the Engineers Corps. We may get some letters from him. Leeming expects to go to France most any time, he was recently in Boston at Fort Strong. Swan at Herreshoffs and Wetherbee at Bath Iron Works are both busy on war orders. The secretary saw Jim Swan on October 16 in Boston; he is looking happy and prosperous and, barring the fact that he told your secretary to "keep the photos and be deed," the interview was pleasant.

This reminds us that we want to keep the photos sent in for the class book for the class records. Everybody stand up and say, "Yes," and write some newsy letters at the same time.

Ike Litchfield can help Tech men in Washington. He is in the Public Service Reserve at 1712 Eye street.

There is a Ned Cunningham Ambulance "somewhere in France"; also set up by the enthusiasm of Mrs. Ned. More power to her! We have already told about "Camp Cunningham," the Tech camp down in Maine.

Fred Norton is doing something on gas producing, also on government service.

Still, after all, most of us are only allowed to stand up when the National anthem is played.

1892.

GEORGE H. INGRAHAM, *Sec.*, 2a Park Street, Boston, Mass.

C. H. CHASE, *Asst. Sec.*, Tufts College, Medford, Mass.

The following news of the military activities of the class of '92 have been taken from *The Tech* of recent issue: Arthur J. Ober recently received a commission as major in the engineer division of the Officers' Reserve Corps.—L. Burrage is on the Red Cross Servian Commission, now in Servia.—William Bement Claflin is captain in the 114th Engineers, Camp Beauregarde, Alexandria, La.

1893.

FREDERIC H. FAY, *Sec.*, 308 Boylston Street, Boston, Mass.

GEORGE B. GLIDDEN, *Asst. Sec.*, 551 Tremont Street, Boston, Mass.

Herbert W. Alden and Frederick C. Sutter, as well as Orton W. Albee, all of Detroit, have received commissions in the Ordnance Department of the Army. Sutter was commissioned captain soon after we entered the war and Albee and Alden were commissioned majors during the summer. Albert L. Kendall, for some time captain in the 1st Mass. Regt. of Coast Artillery, is now in active service with his regiment.

Edward M. Hagar has been elected President of the American International Steel Corporation, which recently has been organized as a subsidiary of the American International Corporation. Mr. Hagar is well known in the iron and steel industry, having been president of the Universal Portland Cement Company, a subsidiary of the United States Steel Corporation, for fifteen years. He graduated from Massachusetts Institute of Technology in 1893, and from Cornell University in 1894, and, after graduation, organized and conducted the business of Edward M. Hager & Co., manufacturers' representatives in machinery lines, in Chicago. When the Universal Portland Cement Company was organized, in 1900, Mr. Hagar was elected to the presidency, and continued in this capacity until his resignation in February, 1915. For two years he was president of the Association of American Portland Cement Manufacturers, and he also was organizer of the Cement Products Exhibition Company, which held its first annual industrial exhibition in 1907. The American International Steel Corporation will engage in the exportation of iron and steel products and plans to develop a foreign selling organization. Offices already have been established in London and Buenos Aires, and others will be opened in the principal cities of the world. The company's general offices are located at 120 Broadway, New York.—From *The Iron Trade Review*, September 13, 1917.

John I. Solomon, whose activities in the pearl industry in the Far East during the past ten years were described in a recent number of the TECHNOLOGY REVIEW, returned to this country last winter and has remained here since because of the war conditions. He is this winter giving a series of lectures under the management of the J. B. Pond Lyceum Bureau. The subjects of his lectures are as follows: Pearls and the Romance of Pearl Fishing; Ceylon, The Crown Jewel of the British Empire; Burma, an Undeveloped Continent; Wartime in British India. He is booked to speak at the Boston City Club on the 22d of November.

Solomon is at the head of the only company in the world which has succeeded in the artificial production of pearls; that is, in his years of experimenting upon the pearl bearing oysters of Ceylon and Burma he has discovered a method by which he can control the growth of pearls in these oysters at will.

During his sojourn in the East he has seen much of the out of the way places which white men seldom visit and has a fund of information which should prove to be interesting lecture material.

The following changes of address have been received: Arthur Farwell, 501 5th Ave., New York, N. Y.—Arthur E. Fowle, 1521 Quarrier St., Carlestone, W. Va.—William C. Whiston, 1311 Mansfield Pl., Brooklyn, N. Y.

1894.

SAMUEL CATE PRESCOTT, *Sec.*, Mass. Inst. of Tech., Cambridge, Mass.

Harold Chase has left North Carolina and is now located at Danville, Va., where he is chemical and textile engineer for the Riverside and Dan Mills. Chase has spent over twenty years in the "Old North State" and has a wide acquaintance there, both socially and industrially. He was for a number of years intimately connected with the cotton mill industry, so brings to the more recent position a very broad and thorough knowledge of the business.

Sam Reed has at least been heard from again. After living in Oregon for many years, first as president of a bank (name unmentionable these days!) and later as the proprietor of a big ranch and large land interests Reed has taken up his profession again and is now at the head of a shipbuilding concern in Beaumont, Texas. Like others in the business he has had his difficulties, but it is to be hoped that the future is cloudless, and that '94 will be doing its part in supplying the shipping so much in demand.

George Owen has been very busy during the past year in his work in the department of naval architecture. The wonderful work which it has done under Professor Peabody's direction since the beginning of the war is too well known to require recital, but it may be mentioned that Owen has had a hand in it, and had devoted

himself unsparingly to giving special as well as regular courses in ship design and allied subjects, not merely during term time but throughout the summer as well.

At last accounts Mason Chace had temporarily left his profession of naval architecture, and was devoting his time to the purchase of material and supplies for the French government.

Ray Price is giving a large portion of his time to service along patriotic lines. After having spent some time in Europe where he saw the real action in the trenches, and was very close to the German lines, Price returned to America and soon after made a trip to Japan and the Far East. He is now treasurer of the Conference Committee on National Preparedness, with headquarters in the Metropolitan Life Building, 1 Madison Ave., New York. Price has spent much time in Washington since the outbreak of the war, and has done valuable service in the cause of preparedness and efficiency.

"General" Tenney has also devoted much time to the consideration of war problems and has recently been in Washington for some time rendering special service in the Ordnance Department of the Army.

Harry Gardner is a member of the committee in charge of the Tech Auxiliary which has the management of all the relief work, work for Tech men over seas, Red Cross and similar activities.

McJennett has returned to the Institute as instructor in drawing. Those who can remember as far back as freshman days may remember with a tinge of envy the row of H's that followed McJennett's name on the record sheet posted in the top of Rogers. Since that time McJennett has taught more or less constantly in the public schools of New York or in evening classes, as at Cooper Union. He now returns to be associated with another classmate, Breed, in teaching at Tech.

Clafin has recently welcomed his son back from France. The young man left Harvard in the spring to become attached to the American Ambulance service, and for six months had a very active time, a part of which was at Verdun. While so engaged he was wounded by a fragment of an exploding bomb and suffered the loss of a finger as well as minor wounds. After treatment at one of the hospitals and the healing of his hurts young Clafin tried to get into the aviation service and was refused. After attempting to get in one other branch of the French service he decided to come home. Young Clafin has remarkable ability as a pianist, and it is to be hoped that his injuries will not prove a great handicap to his performance in this line. Incidentally he is an excellent student along other lines.

Fowle has recently published through the Smithsonian Institution a pamphlet on Water Vapor Trans. to Low Temperature Radiation. This adds one more to the already long list of

works from the Smithsonian coming from the pens of Fowle and Abbot.

Shurtleff has recently prepared plans for the treatment of Commonwealth Ave. west of Massachusetts Ave. These plans are now being realized, and the street will be greatly improved for motor travel by reducing curves and broadening. The plan involves the removal of the Lief Erickson monument a few hundred feet to the west so that it will occupy a much more imposing position as one enters lower Commonwealth Ave. This is but one of the numerous landscape treatments by Shurtleff to receive high commendation in recent times.

Prescott has been commissioned a major in the Sanitary Corps of the Medical Department of the Army. The Sanitary Corps was created during the past summer, largely through the energetic action of Major Cole, the Institute's very efficient and popular professor of military science. It is in reality a gateway through which non-medical men can become of service in the army organization, and as this group of individuals especially trained in bacteriological, chemical and sanitary work is a large one, it offers the government an opportunity to secure experts in certain lines, and offers the men a chance to be of service where they can do the most good. Prescott is attached to the Food Division, and has special charge of certain investigation and instructional work, as well as some inspection at the army camps. He will be detailed at the Institute for the greater part of the time to train men for special work along the lines indicated. He is thus enabled to carry on his regular work at Tech, since this is regarded by the Surgeon-General as of particular value in equipping men for the special lines desired.

1895.

W. D. PARKER, *Sec.*, 12 Bosworth Street, Boston, Mass.

For this number of the REVIEW, the secretary started out with the idea of getting first-hand news about '95 men who are in active service, or in any line of war work, but to date has met with very little success. Backwardness in sending in items for the Class Notes is not peculiar to '95 alone, as can be seen in reading the more or less plaintive appeals appearing now and then in the notes of other classes. It is, nevertheless, a great handicap to the secretary in obtaining material for this column, and he herewith adds once more his own hopeful appeal for help.

Mrs. T. H. Wiggin writes as follows:

Mr. Wiggin was called suddenly to France on July 31, and is there now, serving as captain of Engineers with the American Expeditionary Force. I do not know the exact nature of his duties, but he reports directly to General Pershing, and is probably engaged in investigating the water supply for the United States Army, possibly already engaged in construction work.

Mr. Wiggin writes that he is near the Front, though not within the shelled area. His days are long and strenuous, but he meets with great courtesy everywhere, and a considerable knowledge of English among the French officers.

P. M. Churchill is major commanding the 2d Battalion, 304th Regiment of Engineers, located at Camp Mead, Admiral, Md.

Gerard Swope has been, for the past five months, his secretary writes, in the Far East, and Huxley gives the added information that Swope is now in Japan, and likely to stay for quite a long time. He intends to go to Russia, but will probably not go as long as the political situation there continues to be so unsettled. His trip is in the interests of the Western Electric Co., of which he is vice-president, and is probably for the purpose of negotiating purchases of copper.

Huxley also writes as follows:

Frank Park I see occasionally, and he seems to be fat and happy.

Arthur Canfield spent a Sunday with me a while ago and he also seems to be enjoying life. He and I vie with each other as to who can say the worst things about the Germans, and so far the contest has been a draw, but I think the odds are slightly in my favor.

As to myself, I have not been away from my desk all summer. You can imagine that this is a pretty strenuous time for exporters. I am captain of the Home Guard out where I live, and in spite of the epithet of "tin soldiers" we have a pretty good company and do pretty good work. We have drilled two evenings a week all summer long, and are now drilling every Sunday afternoon, and a detail from the company is performing guard duty in the town every night. Camp Merritt is about a mile and a half north of my house, and there are at present eight thousand workmen engaged in completing the camp, which is ultimately to take care of about forty thousand troops. The 49th U. S. I. is stationed there at the present time for military police work and guard duty, and we have been trying to make it pleasant for some of the officers, and I think we have succeeded in doing so. At any rate, we ourselves have formed some very delightful acquaintances among the officers, who are a particularly attractive and fine lot. I have no particular plans for the future, except that just as soon as possible I am going to South America and then to Australia, and then to South Africa and home again, but I probably will not go away until the middle of winter or possibly early spring.

R. K. Sheppard and the secretary passed the time of day with each other at the Crawford House, White Mountains, late one afternoon in September, as they were passing through in opposite directions, Sheppard being on his way through the Notch. Later in the evening, the secretary renewed acquaintance with Professor Cross, who had arrived a day or two before, for a fall vacation free from class room cares, it being the first time since his long connection with the Institute. The secretary searched for traces of the wear of time in the professor's personality, but in vain, although twenty-five years more or less have passed since he told us of the machine which was operated by a crank.

Friends of A. E. Zapf, Course IV, will be interested to learn that he has a nephew, Kenneth C. Albright, in the Navy in active service. Albright enlisted from the Naval Reserve of California, as seaman, and was assigned to the S. S. *St. Louis*. After passing

through the Canal from the Pacific, he took part in the convoy of Pershing's Expeditionary Force.

The following changes in address have been received: Louis K. Rourke, care of Chile Exploration Co., 120 Broadway, New York, N. Y.—Walter W. Reed, Tennants Harbor, Me.—Alfred L. Simmons, Eliot, Me.—Parker H. Kemble, 293 Marlborough St., Boston, Mass.—Walter R. Phemister, 3924 Russell St., St. Louis, Mo.—Mrs. Elliot G. Brackett (Catherine F. Pedrick), 166 Newbury St., Boston, Mass.—Mrs. George F. Dodd, Jr. (Florence P. Salisbury), 99 Fourth Ave., East Orange, N. J.

1896.

CHARLES E. LOCKE, *Sec.*, Mass. Inst. of Tech., Cambridge, Mass.
J. ARNOLD ROCKWELL, *Asst. Sec.*, 24 Garden Street, Cambridge, Mass.

The secretary has endeavored to find out what members of the class were doing in the present crisis, and has written a number of inquiries. In various ways the following information has come into his hands. The secretary feels that it is not complete by any means, and hopes that other class members will send in word regarding their activities.

G. S. Hewins is manager for L. H. Shattuck, Inc., Agents for the U. S. Shipping Board, Emergency Fleet Corporation, with a contract for building eighteen 3500-ton wooden hulls at Portsmouth, N. H. The yards are prepared and ways laid and they are now awaiting first shipments of timber for laying keels. It is expected that all the vessels will be launched in 1918.—Charlie Lawrence has not regularly enlisted in the army, but is sergeant in his home district of the Home Defence League of New York City, which is a branch of the Police Department. He has furthermore been very active in the selling of Liberty Bonds.—Welles Mortimer Partridge is in a naval prison, not in durance, but merely voluntarily. He is engaged in an anti-submarine proposition and finds a prison the most convenient place to stop.—Ben Hurd is residing in Nutley, N. J., and the mayor of Nutley appointed him as organizer of the Home Guard there. They have now armed and uniformed 300 men in battalion formation, with a machine gun unit and a hospital unit, properly equipped and drilled. There also is a state organization called the Defense League of New Jersey, which enrolls among its members the Home Guard units throughout the state, and of this organization he is vice-president. They are working very closely with the governor and adjutant general's department in assisting them in this Home Guard development.—Danny Bates is located in Washington, where he will be glad to see any of the boys. He received an urgent request from the Ordnance Department at Washington for his services for the dura-

tion of the war in the Supply Division in connection with field depot work, with headquarters at Washington. The directors of the Lewiston Bleachery & Dye Works, of which he has charge, have granted him leave of absence for the duration of the war and he is about to accept a commission as major, Ordnance, Officers' Reserve Corps, and take up his active duties before the end of this month. His family will remain at their home in Lewiston and his business associates will carry on their work at the bleachery, being in touch with him from time to time as he is able to get back home for over a week-end.—Joe Harrington was appointed by the president of the American Society of Mechanical Engineers a member of a committee to act in an advisory capacity to the United States Bureau of Mines in the department of fuels. This committee consists of Prof. C. R. Richards, Dean of the College of Engineering, University of Illinois, and C. J. Bacon, steam engineer for the du Pont Powder Company.—The following notice taken from a San Francisco paper tells of Taft's work:

The carpenters of this city who during the past three weeks have been constructing the new cantonment at the Presidio, under the leadership of Harrison S. Taft, on Thursday evening completed the two hundred and tenth building in the eighteen working days, and brought to a close one of the fastest pieces of construction work ever done in this city. The average speed of construction was eleven and a half buildings per day, equal to a new building every forty-two minutes. During the second full week of the work, when over six hundred men were employed, the speed was fifteen buildings per day, or a new building every thirty-three minutes. The best eastern speed for a single building is said to have been one hour and fifteen minutes.

Not only did the carpenters establish an enviable record, but the lumber merchants of this city established a record in the delivery of two and one-half million board feet of lumber from local yards in eighty-four working hours, a speed never before attained in this city.

The record made by the workmen employed on the work was made without any knowledge of what was being done in other cities and without any special attempt to establish a record, all being accomplished with a well developed plan of organization and coöperation of all hands concerned. It shows what the carpenters of San Francisco can do when assembled under efficient leadership.

Billie Anderson has received his commission as captain in the Engineer Officers' Reserve Corps. His orders were as follows:

You are assigned to active duty effective September twenty-fifth, and will proceed to Washington Barracks, District of Columbia, in time to arrive there October first and report in person to Commanding Officer for transportation to Belvoir, Virginia, and upon arrival there report to Commanding Officer Engineer Training Camp for duty as student. The travel directed is necessary in military service. By order Secretary of War, McCain.

Harry Fiske has not sent in any personal report of his activities, but the newspapers state that the Fiske Rubber Company employees have subscribed to the Liberty Loan to the extent of 97 per cent. of their number, and that the company also has made a big subscription, so apparently Harry is doing something to aid the country.—LeBaron Russell has also been active in the cam-

paign for selling Liberty Bonds in Boston.—The following changes of address have been received: A. L. Drum, Room 624, 76 West Monroe St., Chicago, Ill.—Henry Gardner, 605 Edgevale Road, Roland Park, Md.—Dr. Harry S. Gilman, 29 Commonwealth Ave., Boston, Mass.—George S. Hewins, Newcastle, N. H.—Walter M. Stearns, 38 Lowell Road, Schenectady, N. Y.—William H. Thomas, Jr., South Norwalk, Conn.

1897.

JOHN ARTHUR COLLINS, JR., *Sec.*, 67 Thorndyke Street, Lawrence, Mass.

John P. Ilsley, II, is now located at the Becker-Brainerd Milling Machine Co., Hyde Park, Mass., as general manager. For some years Ilsley has been with Niles-Bement-Pond, machine tool makers.—John M. Gilmore, VI, gives his address as Norton, Mass. As John does not say what position he is filling we can give no further information. Possibly he is taking a course of study at the Wheaton Seminary for young ladies.—William H. Fox, VI, is now in New Bedford, Mass., with the New England Telephone and Telegraph Company.—Arthur L. Jennings, VI, is at Hyde Park, Mass., with the John T. Robinson Co.—Alfred K. Downes, I, is connected with the office of the Valuation Committee of the Chesapeake and Ohio Railway, at Richmond, Virginia.—The secretary had a visit recently from E. F. Learned, II. Learned is with the Day Baker Motor Truck Co., of Boston.—Prof. H. W. Smith, VI, was one of two professors from the Institute who were in charge this summer of the navigation school at Philadelphia. This school was one of several instituted by the United States Shipping Board.—Arthur T. Hopkins is now located in New York City. He has been transferred from the Mechanical Division of the United States Rubber Co. to the Footwear Division. He is at present organizing a "Service Department" with special reference to labor problems, industrial relations, labor saving, and technical and engineering problems. His address is P. O. Box 1534, New Haven, Conn.

1898.

A. A. BLANCHARD, *Sec.*, Mass. Inst. of Tech., Cambridge, Mass.

Charles Scribner's Sons have recently published a book by Seth K. Humphrey entitled "Mankind: Racial Values and the Racial Prospect." The headlines of nearly a whole page review of the book by Nathan Haskell Dole in the *Boston Transcript* of September 27, 1917, are too entertaining not to give here in full:—"Sobs of A Sad Scientist. The mournful book of Seth K. Humphrey, who says Joseph 'had it all over' John D. Rockefeller and

Ramases makes our Magnates look puny." The review itself is not so unkind as the headlines might suggest and it concludes with the following:

We may not agree with the author in all his reasoning; he is quite too much of a Jeremiah. But he has certainly produced a book which deserves to be read and widely discussed.

Lester Gardner has received a commission in the Aviation Section of the Signal Corps, U. S. A.—David J. Myers has been added to the faculty of the Department of Architecture of the University of Washington (state).—John F. Wessel was recently elected a vice-president of the United Gas & Electric Engineering Corporation of New York, and will take charge of the operation of the northern properties. He has been identified with lighting and railway interests for many years, and prior to coming to New York at the end of 1913 he was general manager of the Mahoning & Shenango Railway & Light Company, Youngstown, Ohio.—Winslow, now Major Winslow, has recently returned from Russia where he has been upon an extended mission in the interests of the Red Cross.

1899.

W. MALCOLM CORSE, *Sec.*, 106 Morris Avenue, Buffalo, N. Y.

BENJ. S. HINKLEY, *Asst. Sec.*, North Station, Boston, Mass.

A Technology '99 dinner was held at the Engineers' Club, Boston, Mass., Monday, September 24, 1917. The following were present: B. S. Hinkley, Miles Sherrill, Hervey Skinner, Harry Mork, Henry C. Eaton, Ed. Sheak and W. M. Corse. Plans for the twentieth reunion were discussed, all present thinking favorably of the reunion. Any suggestions for the place for a reunion will be welcomed by the secretary.—The secretary visited Clifford Swan in New York recently and spent a very pleasant evening at his home. Clifford is thoroughly enjoying his work.—D. C. Churchill is back in the good old U. S. A. again and is located at Oberlin, Ohio. He writes that he is anxious to get in touch with as many '99 men as possible. Churchill has been in India for a number of years.—W. M. Corse was elected president of the American Institute of Metals at its eleventh annual convention at Boston, September 24 to 28. Corse has been secretary-treasurer of the Institute for ten years and has had much to do with shaping its policy. The Institute through its members is actively coöperating with the Government on the subject of non-ferrous metals including brass, bronze and aluminum alloys. It is the only society in the United States dealing exclusively with the technical and educational side of non-ferrous alloys.—Hervey Skinner is vice-president of Arthur D. Little, Inc., whose company is erecting a fine new laboratory near the Tech buildings on Charles River Road, Cambridge.—W. M. Corse spent a week-end with Sherrill in September and enjoyed splendid weather at Rexhame.

The contrast with the brand of weather at Rexhame during the seventeenth reunion was very marked. Sherrill proved to be the same champion golfer as formerly.—Miss Henrietta C. Dozier has moved from Atlanta, Ga., to Jacksonville, Fla.

Frederick W. Grover writes:

I have been spending the summer at the Bureau of Standards working with others on a circular on wireless measurements to be issued by the Bureau soon. I expect to return to Colby College in October. College opens late this year to allow students who have been engaged in the movement for helping in the farm work of the State to finish this work before taking up their college work again. I have met no '99 men here, but I have seen quite a little of Washburn, '09, and Hunt, '07, who have also been at the Bureau of Standards this summer, engaged in war work.

Clancey M. Lewis writes:

I met W. C. Phalen of our class up in the Olympic Mountains September 9, and as the day was Sunday and raining we had ample time to recount our undergraduate experiences and recall a number of familiar faces and names. He mentioned having had quite a pleasant visit with W. M. Corse recently in Buffalo. Phalen, as you know, is a geologist with the U. S. Bureau of Mines, and at the time I met him he was *en route* to look over some ferro-manganese deposits, large bodies of which are exposed to the surface in the vicinity of the resort where we were stopping, and some development work has been done. This is but a small item in Dr. Phalen's investigations this season, as he has been in the field since April and has inspected every known deposit of manganese, traversing every state in the Union. He has thrown off a good deal of the grind acquired at Tech and is gradually becoming a faithful and characteristic servant of our Bureau System of the Government.

As for myself, I have been actively identified with the Red Cross drive and during the month of June had charge of five of the largest counties in the State (Washington), and with capable assistants was successful in more than doubling our apportionment. Just now I am active in closing up preparations for the Eighteenth Annual Good Roads Convention of the Washington State Good Roads Association, which will be held in Bellingham, Washington, September 27-28, and of which for the past year I have been secretary. These activities, together with the secretaryship of the China Club of Seattle and the acting secretaryship of the Home Committee of the 18th Engineers (Railway), which regiment is now in France, are part of my public service and outside my regular work as secretary of the Manufacturers' Association.

Geo. R. Townsend writes:

I am vice-president and general manager of the International Steel & Ordnance Co., Lowell, Mass., which is engaged in the manufacture of percussion fuzes for field ammunition. I am also associated with the American Shell Corporation, Paterson, N. J., manufacturers of 77 MM high explosive projectiles for the United States Government, and with the T. A. Gillespie Co., New York City, general contractors for the Government on field ammunition.

The appointment of Burt L. Richards to the post of assistant deputy commissioner of the State Board of Health of New York suggests that during the summer there has been quite a moving of Tech sanitarians to higher places. Mr. Richards who was nine or ten years ago head of the bacteriological laboratory of the Boston Board of Health, has been since that time in commercial bacteriology in Urbana and in Boston. He goes now to a most important place in one of the strongest health organizations in the

country. It is important to note that the position was one in the civil service, and that Mr. Richards headed a long list of competitors.

1900.

INGERSOLL BOWDITCH, *Sec.*, 111 Devonshire Street, Boston, Mass.

On the first of October the secretary was informed by the editor of the REVIEW that copy for the class letter would be acceptable on October 20. This was the longest notice which the editor had given the secretaries for a very long time and plans were laid to get a lot of news from the class. You can all judge his feelings when on looking over the material on hand he finds only one answer to his appeal for news. The other twenty-two men written to must have gone to Washington to help out Litchfield and he has kept them too busy to write. Perhaps a mistake was made in picking out men who were doing something interesting and if any members of the class have any suggestions to make and can furnish a list of men who like to write letters, the secretary will be more than pleased to receive them.

In an automobile magazine a notice was printed stating that it would publish the names of all persons who were known to have injured anybody and went off without leaving their name or attempting to aid the one injured. The secretary is thinking of adopting such a plan by publishing the names of the men to whom he has written and from whom he receives no reply. He will not do it this time as ample warning has not been given.

The most important piece of news is that the southern part of Massachusetts is being protected by Dick Wastcoat or with due respect to his rank, Captain Richard Wastcoat, D Company, Taunton, 14th Regiment Infantry, State Guard. The people in Taunton must now be able to sleep at night knowing that the protection of the city is in such excellent hands.—Thomas E. Penard is dean of the School of Engineering conducted by the Y. M. C. A. of Worcester. A four-year course has been provided for the benefit of the skilled labor in the factories.—Jouett has been made terminal engineer of the New York Central Railroad in charge of construction work at the Grand Central Terminal and of the plans for the West Side improvement. This scheme involves the expenditure of nearly sixty million dollars and when the work is finally started will involve many different kinds of construction. He met Leonard recently and reports him well and happy.—Jim Batcheller writes that he is in charge of the property of the Virginia Lead and Zinc Corporation at Mineral, Virginia. Three of his best men have enlisted and three others have been drafted for the war and he has been very busy doing the work of these men. Later he hopes to do something more direct to "help kill the mad dogs of Central Europe." His company is

developing and concentrating lead and zinc ore and in the same district very large quantities of pyrite are produced from which sulphuric acid is made for munition purposes and fertilizer. He wants the secretary to remember him to all his friends. Another letter will be published in January and all news for this will be greatly appreciated by the secretary.

1901.

ROBERT L. WILLIAMS, Sec., 107 Waban Hill Road North,
Chestnut Hill, Mass.

Langdon Pearse, hydraulic and sanitary engineer of Chicago, was one of the Aldred lecturers at Johns Hopkins Engineering School last May. His subject was "Experimental Engineering with Particular Reference to Water and Sewage Problems."—Howard T. Chandler writes:

Knowing that you have your ear upon the ground most of the time listening for news from Technology's most famous class, I thought you would be interested to know that after filling the position of assistant superintendent of Walter Baker and Co. for eleven years I have been appointed superintendent.

Austin T. Hyde is acting superintendent for the Fort Hill Chemical Co., Rumford, Maine.—Frederick S. Clapp in the *Engineering and Mining Journal* of August 4, 1917, writes an interesting article on "Remedies for the Petroleum and Gasoline Situation." He says in part:

The country's annual production of petroleum is decreasing although consumption of gasoline is increasing alarmingly: The development of gasoline substitutes will take time. Of the many remedies proposed, utilization of oil shales and the discovery of new fields are the only ones that can furnish more than temporary relief. The latter can be accomplished with certain success if the petroleum geologists of the country are organized under a central bureau for the systematic examination of all possible fields in the most rapid and efficient way and with a minimum duplication of work.

Harold B. Wood is sales manager and secretary of the Gifford Wood Co., Hudson, N. Y. Under the heading "interesting News Regarding Yourself," which the secretary asks for in his annual data sheet, Wood writes:

A lot interesting to me but not so much to others. Have recently taken up my duties as an alderman. Am elected each year as president of the local Chataqua Committee. I am still playing the organ at the Presbyterian Church with Mrs. Wood as director. I have finished giving a number of lectures on harvesting ice accompanied by moving pictures before conventions in western and eastern cities.

Charles H. Harris is an electrical engineer with the Mississippi River Power Co., Keokuk, Iowa.—Walter M. Curtis is consulting engineer for The Fiberoid Corporation, Indian Orchard, Mass. He is in general charge of all extension, development and experimental work, organization and management problems.—F. W. Freeman is general manager for the Windham Mfg. Co., Portland, Maine, manufacturing woolen fabrics.—Charles G. Tufts is general superintendent for the Semet-Solvay Co., Syracuse, N. Y.—

Our former class president, Ellis F. Lawrence, must be busy, as he writes:

Member of Oregon State Conference of City Planning. Member of Committee on City Planning, American Institute of Architects. Making plans for new building at University of Oregon. Hold contract for new buildings at Whitman College, Walla Walla, Washington. Just finishing seven houses, \$6,000 to \$35,000 each. Just finishing several cemetery mausoleums.

The following recent changes in address have been received: Ralph Whitman, San Domingo, Haiti.—Frederick W. Freeman, 105 Noyes St., Portland, Maine.—T. Frederick Reardon, 639 Washington St., Wellesley, Mass.—Charles P. Rockwood, Geneva, Ill.

1902.

FREDERICK H. HUNTER, *Sec.*, Box 11, West Roxbury, Mass.
J. ALBERT ROBINSON, *Asst. Sec.*, 203 Washington Street,
Canton, Mass.

Norman Borden was commissioned major of infantry on the completion of his training term at Fort Niagara in August and is now busy in helping train the National Army. Borden's military progress has been rapid as he had been appointed sergeant in Company E of the Sixth Massachusetts only a short time before the declaration of war. He was transferred to Fort Niagara Training School with a provisional appointment as captain, and at the end of the three months' training term was promoted to major.

Lewis Moore went to Plattsburg in the Spring to train for a commission in the Engineer Corps. He was soon transferred to a camp near Washington, and at the completion of the training period was commissioned captain of engineers and assigned originally to Camp Devens at Ayer, Mass., but was shortly transferred to special work at Washington, and at the time of writing is on his way to France as one of a small number of engineers in charge of special work of a confidential nature.

Kenneth Grant is another '02 man who went out for a commission in the Engineer Corps and was commissioned captain. He has been attached to the Aircraft Production Board and has been closely associated with the development of the Liberty Motor. When Adrian Sawyer saw him recently in Washington he was planning for the equipment and housing of the American aircraft in France.

Redfield Proctor is another '02 man who has been commissioned Captain of Engineers, R. O. C.—Arthur Nelson, who has been carrying on building operations in the Boston suburbs for the past few months, has gone to Philadelphia to take charge of new construction work at the League Island Navy Yard. As Nelson was rushing to get a train when the Secretary met him we did not have time to get particulars.

Walter Teague has accepted an appointment as inspector of naval construction and has been busy at the Boston Navy Yard

getting the ex-German liners fitted up for transports and repairing the machinery damaged by the German crews at the time of the declaration of war. He states that there is never less than ten hours a day including Sunday and that the force at the Boston Navy Yard often works until 10 o'clock at night and even longer.

Dickson, we learn, returned from the Philippines sometime since and is busy in construction work at the Boston Navy Yard where a third '02 man, Les Millar, also reported for duty the latter part of September.

Concerning non-military matters,—Ireland has been admitted to partnership in the firm of M. A. Hanna & Co. of Cleveland and Duluth, with which he has been associated for many years. We understand he will continue to make his headquarters at the Duluth office.—Litchman is assistant professor of metallurgy at Pennsylvania State College.—Hunter is conducting the class in estimating at the Franklin Union, Boston. This is the institution established through the gift of Benjamin Franklin and is an industrial school with most of the classes given in the evening. The course which Hunter is conducting is the only one in this line of work given in Boston.—Pendergast is serving as adviser on the alumni news for *The Tech*. His wide acquaintance with Tech men in all parts of the country, and his experiences in various portions of the world make his counsel peculiarly valuable to the student editors.

1903.

M. H. CLARK, *Sec.*, 1790 Broadway, New York, N. Y.

R. H. NUTTER, *Asst. Sec.*, Box 272, Lynn, Mass.

Speaking of military matters, in the October issue of *The India Rubber World* we ran across the following item:

Gilbert H. Gleason, son of William H. Gleason, secretary of the Revere Rubber Co., is in the First Troop of Cavalry, Massachusetts State Guard, soon to be mustered into the United States service.

Gleason says:

Any mention in the *India Rubber World* that I am about to be mustered into the United States service is, to say the least, rather premature. I do not know who is responsible for the article or what the article said, but at present the extent to which my patriotism has carried me is into the First Troop, Massachusetts State Guard, which happens to be the only troop of cavalry they now have in the State of Massachusetts.

I was very much delighted on showing up at the Armory one night to find our old classmate, Andrew Hepburn, all dolled up in a regular uniform, and he seems to be enjoying the hard work we are getting just as much as I do.

I was told by somebody the other day that Cappelle has a captain's commission and is on the way if not already in France at this time. I ran across Billy Evans at the Nash Pump exhibit in the Chemical Show in New York last week, as you remember, and had quite a fanning bee with him, going over old times.

Skowronski was also there in charge of the booth of the Anaconda Copper Mining Company. He is regularly located with one of their copper refineries at the Raritan Copper Works, Perth Amboy, N. J.—Frank Z. Brown, for the past fifteen (?) years professor

and head of the department of engineering and science at Richmond College, Richmond, Va., and Virginia Mechanics Institute, is reported to be the prime promoter and general manager of the Dexter Motor Company, according to a Bangor, Me., paper.—From *The Tech* we learn that Frank B. Jewett is a major in the O. R. C. (Signal) and on duty at the works of the Western Electric Co.—Charles S. Cole has been commissioned captain in the Ordnance Department of the O. R. C. and has been called to active duty.—H. S. Baker is reported as having been commissioned a major, I. R. C., and placed in charge of a southern cantonment.—The latter part of September the spirit moved Tom Sears to “start something” and as a result Atwood, Jackson, Scholtes, Sears and Nutter met at the Engineers’ Club for dinner and later went to the Park Square Theatre. This was the nearest approach to an ‘03 dinner that Boston has seen for some time.—In August E. H. Millard and his wife motored up to Boston from Pittsburg. The only reason they escaped arrest for overspeeding on this trip is that they went so fast no traffic officer could get their number.—H. Scott Morse with his wife and small son Dan, of Detroit, spent part of September and October in New England. Little Dan, who is about two years old, is a booster for the Institute and can make a noise which very closely resembles the Tech yell.

Address Changes

Louis W. Adams, 151 South Center St., Bethlehem, Pa.—W. Lorrain Cook, Casilla 810, Antofagasta, Chile, South America.—Dana H. Fisher, 60 Maynard St., Pawtucket, R. I.—Prof. Harold B. Litchman, 10 High St., Marblehead, Mass.—Z. N. Matteosian, 244 Madison Ave., New York, N. Y.

1904.

HENRY W. STEVENS, *Sec.*, 39 Boylston Street, Boston, Mass.

Nearly all the class notes of 1904 deal exclusively with the activities of the male members of the class. It is very seldom that the secretary has a chance to chronicle anything about the class members of the opposite sex, and it is with pleasure that the following clipping from the *Boston Herald* of August 26, 1917, is presented.

The Massachusetts Federation of Women's Clubs is engaged in a campaign of food production and conservation and has done effective work in every city and town in Massachusetts. It is now proposed to extend its activities to the public schools, so that every young woman may be instructed.

The work is in charge of a committee of which Mrs. John D. Mackay of Quincy is chairman. When the declaration of war against Germany was made she commenced a campaign in Quincy for food production and succeeded in enlisting the cooperation of its leading citizens.

Mrs. Mackay was recently offered the appointment of chairman of the Women's Federation committee on food production and conservation, which she accepted.

Mrs. Mackay has long been connected with the work of the Woman's Club of Quincy and has been one of its most active workers. She served first as chairman of the educational committee and for a number of years she, with Mrs. H. H. Kitson, the sculptor, had charge of the children's gardens in that city. They created an interest in this work among the children and the numbers increased to 2,000. Afterward, she became chairman of the forestry committee and through her efforts many new shade trees were planted on the sides of the streets of Quincy.

Mrs. Mackay has done much to interest the women of the city in the matter of food conservation and circulars have been printed in foreign languages to instruct those of the different nationalities.

Mrs. Mackay, whose maiden name was Martha Kincaide, is a native of Quincy, and a sister of Col. Henry L. Kincaide. After her elementary education she attended Radcliffe, and later took a course of study at the Massachusetts Institute of Technology. She is a graduate of the Clark School at Northampton. For a number of years prior to her marriage to Mr. John D. Mackay she was a teacher in the Horace Mann School for the Deaf in Boston.

As the following clipping will show, the Commission for the Prevention of Tuberculosis in France carries a big "Gunn" which will make itself heard.

The International Health Board of the Rockefeller Foundation announces the completion of its preliminary arrangements for the Commission for the Prevention of Tuberculosis in France. The commission will be headed by Dr. Livingston Farrand, president of the University of Colorado and for ten years the organizer and executive secretary of the National Association for the Study and Prevention of Tuberculosis. As associate directors, Dr. Farrand will be accompanied by Dr. James Alexander Miller, of New York; Homer Folks, of New York, and Professor Selskar M. Gunn, of Boston. Herman G. Place is secretary to the director.

Selskar M. Gunn holds a professorship in the Massachusetts Institute of Technology, is the secretary of the American Public Health Association, and editor of the *American Journal of Public Health*. He has had long experience in public health administration and in the working out of the new health laws of Massachusetts. His work in France will be specifically to take charge of the educational campaign which the commission proposes to inaugurate.

The secretary has received a card from Hiller announcing the birth of another son, Robert Everett, an August 26, 1917.—A. C. Foster has been transferred by Congressman Fuller from the Packard Motor Car plant at Boston to the congressman's Washington office.—Roy E. Dimock is now with the Jones and Laughlin Steel Works and his address is 334 Meyran avenue, Oakland Station, Pittsburgh, Pa.—Carle R. Hayward was in general charge of the Christian Endeavor Convention, held at Sagamore, Mass. from August 27 to September 2, 1917.—A. W. Munster has been appointed purchasing agent of the Boston and Maine Railroad, with offices in the North Station, Boston.

As has been previously mentioned in these columns, Kalmus and Comstock have been engaged for the past five years in working out and perfecting an entirely new method of producing motion pictures in natural colors. They have named their product the "Technicolor" motion pictures, and recently the secretary had the opportunity of witnessing its first public exhibition.

It is hard to describe the sensation one experiences in watching these pictures. We are so accustomed to seeing motion pictures in black and white, that those colors seem natural and proper. To see the pictures in real colors, then, seems unnatural, if such a thing can be possible, and it was some time before the writer accustomed himself to that idea, so that he could begin to enjoy the true beauty of the production.

The colors were absolutely true, from the most vivid to the most

delicate shades. Scenes on the ocean were particularly effective, as was a view of "Old Glory" snapping in a stiff breeze.

It was a remarkable exhibition and far ahead of anything in colored motion pictures ever presented before. It is to be hoped that the "Technicolor" will soon be on exhibition in all moving picture houses.

Cecil F. Baker has accepted an offer to head the department of architecture at the Kansas State Agricultural College. Professor Baker is a graduate of the University of Illinois as well as of the Institute. He studied in Europe and for several years has been in business in Chicago. His new duties will include the planning of better homes and buildings for the "Sunflower State."

In closing these notes, the secretary again begs his readers to notify him immediately of any classmate known to be in any branch of government service.

1905.

GROSVENOR D'W. MARCY, *Sec.*, 246 Summer Street, Boston, Mass.

CHARLES W. HAWKES, *Asst. Sec.*, 26 Saxon Road, Newton Highlands, Mass.

The following is a roster of 1905 men in the different branches of the Service, of which the secretary has record. Anyone noting any corrections or additions will please notify the secretary.

Army

Clark, William A., 20th U. S. Engineers, care Adjutant General's Office, Washington, D. C.

Gabriel, Capt. H. R., Engineers' Officers' Training Camp, Fort Leavenworth, Kansas.

Graham, Capt. E. M., Co. B, 113th U. S. Engineers, Camp Shelby, Hattiesburg, Miss.

Hinkley, Capt. P. E., Supply Officer, 20th U. S. Engineers, American University, Washington, D. C.

Perkins, Grafton B., 2nd Officers' Training Camp, Fort Myer, Va.

Robbe, Capt. L. E., American University, Washington, D. C.

Turner, Major George E., U. S. Field Artillery, 84th Division Ordnance Officer, Camp Zachary Taylor, Ky.

Navy

Babcock, Lieut. C. W., U. S. Naval Reserve, in command Patrol Boat *Alacrity*, address 8 Irvington street, Boston.

Fogarty, Naval Constructor, William E., U. S. N., Seattle Construction and Dry Dock Co., Supervising Constructor for U. S. N., Seattle, Wash.

Furer, Julius A., Bureau of Construction and Repair, Navy Department, Washington, D. C.

Grady, Lieut. Ronan C., U. S. N., in command U. S. S. *K-5*, Atlantic Fleet.

- Hall, Lieut. William A., U. S. N., care Navy Department, Washington, D. C.
- Henry, Naval Constructor Sidney M., U. S. N., Bureau of Construction and Repair, Washington, D. C.
- Keith, Lieut. H. H. W., Department of Hulls, Navy Yard, Boston, Mass.
- Leavitt, C. E., Bureau of Construction and Repair, U. S. Navy, Washington, D. C.
- McBride, Naval Constructor Lewis B., U. S. N., Bureau of Construction and Repair, Washington, D. C.
- Schlabach, Naval Constructor Ross P., U. S. N., Navy Yard, Portsmouth, N. H.
- Simmers, Naval Constructor Clayton M., U. S. N., Navy Yard, Boston, Mass.
- Tower, Lieut. Gilbert S., U. S. Naval Reserve, Navy Yard, Boston, Mass.
- Willson, Lieut. Russell, U. S. N., care Navy Department, Washington, D. C.

The secretary wrote most of the fellows who are in the Service for news for this issue of the REVIEW, but many of them are prevented by the censor from telling the most interesting details regarding their work.

George Turner, who left our Sophomore year for West Point, has been promoted as shown by the following note:

In reply to your letter of Oct. 25, will say that when the National Army was organized, I was appointed Major of Field Artillery and detailed as 84th Division Ordnance Officer at Camp Zachary Taylor, Ky.

Russell Willson writes as follows:

I received your letter of October 4 making inquiry about members of the class of '05, M. I. T., in the Service. It happened that three members of '05, after completing the freshman year, entered the Naval Academy in the class of '06. These men are R. C. Grady, W. A. Hall, and myself. Grady was class president and a shining light of the football team. Hall played on the baseball team and was a member of the staff of the *Class Annual*. All three of us are now lieutenant-commanders.

Grady and I are in the office of the Chief of Naval Operations, Washington. He is working in connection with the submarines and I with codes, ciphers, etc. Hall is out in the Philippines, and until recently was secretary and treasurer of the *Naval Institute*—the technical magazine of the Navy. I have noted with satisfaction the interest which M. I. T. men are taking in the war and the general subject of preparedness and if I run across any notes which may possibly be of interest to you in that connection, I shall send them along.

It will be remembered that another '05 man, Lee Faulkner Goldthwaite, left the Institute in the spring of 1903 for Annapolis. He was killed on July 15, 1907, by the explosion of a turret gun on board the Battleship *Georgia* while at target practice off Provincetown.

Notice of the death of Lieutenant Henry F. Lewis, who was wounded and captured in the battle of Vimy Ridge in April, 1917, appeared in the last number of the REVIEW.

In addition to the list given above of men actively in the Service, many of our class are connected with war work in civilian capacities. Professor Warren K. Lewis and William Green are connected with the Bureau of Mines, and are doing expert research work in connection with problems on gas masks, flame projectors, etc.—Professor Selskar Gunn is in Paris as associate director of the Commission for Prevention of Tuberculosis.—George S. Radford is assistant to the works manager in the Remington Armory, Bridgeport.—Thomas McC. Gunn is abroad in connection with work for the Electric Boat Co.—E. M. Graham writes as follows:

Your letter of October 6 was forwarded to me here. On October 1, I took over former Co. M, 3rd Kentucky Infantry. The company was transferred intact, minus its officers, to the Engineers. It is now Co. B, 113th Engineers—and a hundred drafted men, to fill the company out to full war strength of 250 men, are expected any minute. This regiment, 113th Engineers, has three such companies—that is, National Guard Infantry companies to be converted into Engineers companies. The remaining three companies were already Engineers companies. Our regiment commander is Colonel John C. Oakes, who saw some engineering service in the Philippines several years ago. We are now under a daily drill schedule, members of the company attending daily various schools, as reconnaissance, carpentry, blacksmith, demolitions, revetments, etc. A number of the officers, besides myself, in fact all for the three former National Guard companies, had the three months' training at Forts Harrison and Leavenworth.

I think there are none here from Tech except myself. My classmate, Harry Gabriel, also captain, was sent to some Illinois camp, I heard. His home address is 2628 West Sixth street, Cincinnati, Ohio.

Hearing that Ros Davis was in charge of the aviation school at Princeton, the secretary wrote to inquire and got the following characteristic reply:

I didn't hurry to reply to yours for I knew that there would be plenty of time to get any news into the September number of the REVIEW. Bob was right. I have the airplane department of the School of Military Aeronautics but never fly high, not over fifty feet, the third floor of the Science Building. Anyway, no bird ever flew so high he didn't have to light. My sole claim to knowledge on the subject was based on some course under Professor Peabody who, ten years later, became head of aeronautics at the 'Stute. That went! Dean Burton, however, reminded me that I had had some experience in one of the shows. I made an interesting visit in July to the Royal Flying Corps School at Toronto and Camp Borden. Since then have been right here with the 550 cadets who keep us hustling.

On Sept. 22, the secretary received the following letter from George Thomas, which was mailed in Podolsk, Russia, on July 10.

Two months ago I received the big two part number of the REVIEW describing the celebration of June, 1916, and yesterday I had the pleasure of receiving the January, 1917, number—good stuff all—but just a trifle stale.

The purpose of this letter is to tell you that I am girding up my loins preparatory to a trip to the U. S. A. Since the war started I have been in and out of England twice and consequently have given the beastly Huns four chances at me. The last time I left England, I came to Russia by way of Archangel on a British ammunition carrier and gave them a fine chance at me. Things have changed a little now that Uncle Sam has taken a hand in the game and I don't feel like giving them a fifth chance, therefore I am coming home by way of Japan. It's a devil of a long way around, but it has the advantages of safety and novelty. The Siberian Express is booked up until November and as I cannot wait around here four months just to catch a train, I am coming on an ordinary express train. I

expect it will be some experience, especially as the train runs through Manchuria instead of keeping to the north and in Russian territory as does the crack train.

Am leaving Petrograd August 7 and should hit New York before the end of September. My affairs are badly tangled up. First the war mussed them up and now the Revolution has about finished them off, so that I don't know how long I shall be home but I think I can safely say I shall not get far away from New York before the first of November. That being the case I wish you would write me at "Rowenah Cottage," Fort Trumbell Beach, Milford, Conn., and let me know just what time in October will be best to come to Boston. I am bringing with me a young American who has never been in America—the son of my boss, Mr. Dixon, and I want to show him Boston and Tech under the best conditions. It has occurred to me that there might be something doing in '05 or alumni circles and if so, I should prefer to come to Boston at the right time to take in the festivities. I am trying to make a Tech student out of the young man I referred to above and I should like to show him how we live, both as students and as graduates. If you are planning anything for '05 and would like to secure the services of an inexperienced talker, I am open to inducements to tell you something about what has happened in Russia since the start of the war, including the latest news about the Revolution and most important of all—to predict the immediate future of Russia—subject to the single condition that my young friend can be included in the party.

I wrote you from London, April or May of last year, and again from Podolsk about a year ago, but have no evidence that you received the letters except that I learned a couple of months ago that my bank balance had been depleted by the amount of the cheque I sent you, so assume you duly received the letter.

What has become of the Ten Year Book? Is there or isn't there such a thing? The last I heard, you were still howling for copy.

My family are still making their home Bridgeport, Conn.,—at least winters. I understand that I have two fine children—one of each kind—but I haven't had much chance to get acquainted with them these past four years. I started to get on friendly terms with them in February, 1916, for I was laid up with appendicitis and so took the two kids and Mrs. T. and beat it to Florida for a short holiday and then left them there and resumed my single wanderings.

I thought I had become pretty well Russianized, but since the Revolution they are travelling so fast here that I can't keep up. But that's a story I can tell you about in Boston. In order to make sure that this letter reaches you I am sending an original and two copies at intervals of a few days each.

Thomas landed in New York, as per schedule, and on October 19 we had an '05 supper at the Boston City Club, where he told us in detail about his interesting experiences and his view of the outlook in Russia. While he was far from being optimistic regarding the future, he has a firm faith in the soundness of the Russian people. He believes conditions will probably be worse for Russia before they are better, but has no fear for the ultimate result. The twenty-five classmates and friends who were present certainly learned a lot about Russia and had a most interesting and instructive time. We also had as a guest, Mr. Dixon, the son of the Russian director of the Singer Company who has come to this country with Thomas, and is considering entering the Institute. He told us that one of his duties under the new régime before leaving Russia was censoring all of Tommy's mail. He is a prepossessing chap and should be good material for the Institute.

Jules Barnd has returned to Marion, Ohio. He writes that he attended the reunion of the Technology Clubs Associated in Cleveland last May, and that Barlow, Boggs, Smith and himself were

the only '05 men there, but had a mighty good time notwithstanding.—Charles Clapp writes from the Montana State School of Mines, Butte, Montana, as follows:

I am especially enjoying the close contact with the mining industry which the location of our school in Butte affords. In addition Butte, owing largely to the activities of the excellent geological department of the Anaconda Mining Company, is also one of the few camps where the geologist neither has to apologize for his existence nor has to justify it by the continual writing of papers. Our school is small and badly hit by the war, since most of our students are over twenty-one and physically fit, but still it is one of the larger mining schools; and also one of the best—even if I say it who should not. But why shouldn't it be? for Tech dominates the faculty, with Craven, VI, '98, in mechanical and electrical engineering, Pulsifer, V, '03, in metallurgy, and Clapp, III, '05, in geology. Of course it is not all "beer and skittles"—Montana has already been voted dry—and the winters are cold and long. My youngsters went sliding in the backyard on June 9 and are just about to begin again.

Harry Wentworth recently started on a western trip and agreed to look up '05 men when he had an opportunity along the road. He wrote from Washington on October 2 that he ran into Anderson, '05, on the street, who looked prosperous and happy and was engaged in the laudable occupation of hunting up some other Tech men in Washington. On October 6, he wrote from Joplin as follows:

At lunch Tuesday at the Cosmos Club in Washington with Dr. Noyes of the 'Stute, I saw Starr beaming over in the corner. Last night Allen entertained me at dinner, here at Joplin, and later in the evening I met Mrs. Allen, who had been away, and we had a very pleasant evening. He tells me that Burton, who is in Chile, has recently been operated on for a serious affliction of his shoulder. Allen's business seems to be moving along nicely down here. With some friends, he is operating a couple of properties.

On October 16 from El Paso, Texas, came the following:

While here I have tried to see some Tech men, but with little success. Either I picked out the wrong men, or had bad luck, as I spent most of my time chasing from "had been" to "ought to be but isn't." There are no '05 men hereabouts apparently. Saw Drury of '03, who is in charge of the A. S. & R. mining work in Mexico. Am leaving tonight for a short trip into Mexico, if I can get across without my American passport which I left at home.

The Boston News Bureau published the following item under the date of October 17, 1917.

AMERICAN ZINC

Boston—Henry A. Wentworth has been appointed vice-president of the American Zinc, Lead & Smelting Co. to have charge of the newly formed exploration department which will investigate new properties, processes, etc., which are presented to the company. Mr. Wentworth is a graduate of the Massachusetts Institute of Technology.

Paul J. Ralph writes from Buffalo that he has been in that city since last May as engineer for the Empire Engineer Co., whose business is dredging, generally harbors, and ship repairs. His residence address is 159 College street, and his business address, 1042 Marine Bank Building, Buffalo, N. Y.—Ned Broad has returned to the East as shown by the following message:

Have nothing of extreme importance to advise you about other than Mrs. Broad and myself returned to the East after a three-year visit in California, and am now located with Stanley Motor Carriage Co., Newton, Mass., as chief engineer. This company has reorganized and is preparing to do business on a larger and better basis. Of course am pretty busy now but trust to meet the old classmates in the near future.

Billy Keen, who has been with the Washington Steel and Ordnance Company, has taken the position of general manager for the Chemical Products Co. of Washington, which is concerned with the manufacture of ordnance steel.—Mr. and Mrs. Hiram LeRoy Walker of Philadelphia announce the birth of Hiram Alden Walker on September 15, 1917.—Robert L. Young and Miss Menita Elizabeth Kimball were married on October 12, and will be at home after the 1st of January, at 63 Thorndike street, Lawrence, Mass.—In addition to the changes noted above the following changes should be noted in the addresses given in the Ten Year Book: C. E. Atwood, 80 Gainsborough St., Boston, Mass.—James S. Brown, 146 Irving Ave., Providence, R. I.—John F. H. Douglas, Texas A. & M. College, College Station, Texas.—Percy H. Physeck, Centralia, Florida.—Albert G. Prescott, 27 Chester St., Newton Highlands, Mass.—George I. Rhodes, care Ford, Bacon & Davis, 115 Broadway, New York, N. Y.—Edward C. Smith, 1126 Birchard Ave., Fremont, Ohio.—Alden H. Speare, 156 Sixth St., Cambridge, Mass.—Frederick C. Wales, 1150 Tremont Bldg., Boston, Mass.—Elmer W. Wiggins, 167 Montclair Ave., Montclair, N. J.

1906.

C. F. W. WETTERER, *Sec.*, Tampa Electric Company, Tampa, Fla.
JAMES W. KIDDER, *Asst. Sec.*, 50 Oliver Street, Boston, Mass.

1906 Roll of Honor

F. R. Batchelder, VI, 401st Telegraph Battalion, N. A., Camp Devens, Ayer, Mass.

Major W. I. Couper, Engr. R. O. C., Camp Jackson, Columbia, S. C.

Capt. George F. Hobson, I, 305th Regiment of Engineers, Camp Lee, Petersburg, Va.

Capt. B. R. Honeyman, IV, Engr. R. O. C., Fort Leavenworth, Kansas.

William W. Hosmer, U. S. Expeditionary Forces in France, care of Adj. General, Washington, D. C.

Capt. E. L. Mayberry, IV, Engr. R. O. C., Vancouver Barracks, Vancouver, Washington.

Lieut. S. F. Thurber, II, U. S. N. R., Newport, R. I.

Lieut. P. E. Tillson, VI, U. S. N. R., League Island Navy Yard, Philadelphia, Pa.

The above list is as complete as present knowledge will permit. No doubt there are other names which should appear in the Roll

of Honor. By the next issue of the REVIEW we hope to have a correct list of all '06 men who have joined the colors. Any information from members of the class relative to this subject will be thankfully received by the secretary.

In addition to the men who have donned uniforms there are members of the class who are serving their country as civilians. Among these are:

Lawrence Blodgett, I, who writes upon the letterhead of the Dierks-Blodgett Shipbuilding Company, which concern has contracts for shipbuilding for the Emergency Fleet Corporation.

Charlie Saville, XI, director of sanitation for the City of Dallas writes that the Texas Public Health Department is especially active on account of the location of several of the army cantonments in the Lone Star State.

The Tech for July 14 reports Herbert Whiting, VI, as one of the callers at the Washington Bureau. He is interested in the electrical construction work at army cantonments.

Albert Hemphill is one of a concern of five, three of whom are Tech men, which has been awarded the contract for the entire engineering of the National Guard camp at Hattiesburg, Mississippi.

F. J. Van Hook, I, is reported as having applied for a commission in the Engineers' R. O. C.

Jack Norton, V, left Boston the first of September to take up his new duties as professor in the University of Chicago. His address will be Department of Bacteriology, University of Chicago, Chicago, Ill. The Boston '06 crowd will miss Jack from their gatherings and the whole class will regret his inability to serve as our representative on the Alumni Council. If we wrote all the good things which we might say about Jack's work for the class, especially at the time of the 1916 Reunion in connection with the Ten Year Book, it would sound so much like an obituary that you might think that Jack had died instead of moving to Chicago, so we will simply say that the whole class wishes him the best of success in his new position.—A. K. Adams, III, submits the following from Antofagarta, Chili. "See you in 1919, busy here until then."—E. M. Smith writes that he is with the Halcomb Steel Company at 633 Arch street, Philadelphia, Pa., and that he has just been promoted to take charge of that part of the territory with most excellent prospects for the future.—We wrote a letter to Capt. George Hobson hoping to get some news for the REVIEW. The following reply was received from Mrs. Hobson:

Capt. Hobson is so very busy that I am answering his letters. I myself feel mighty fond of Tech as I was brought up by my pet uncle, Eli Forbes, the first Tech man. Capt. Hobson was appointed to the 305th Regiment of Engineers as senior captain. Upon his arrival at camp, Colonel Spaulding made him regimen-

tal supply officer, which puts him on the Colonel's Staff. I believe he will be at Camp Lee four months and then sail across the "bonney blue." Please remember Hobson to any friends and tell them all to drop him a line.

We wrote to Stewart Coey for news and incidentally remarked that we must do something to avoid the entire absence of 1906 notes which marked the April REVIEW. Our appeal prompted the following reply:

Change my address to 261 Highland avenue, Newark, N. J., and my business to that of works superintendent, The Celluloid Co., Newark, N. J. I may possibly furnish you with a little news so that you can put something in the REVIEW. It does give me a queer feeling to see the 1905 alumni notes and then the 1907 notes. It would look as though 1906 just naturally felt ashamed of herself. Of course it is everyone's fault for not sending in the news. You have heard me talk of the most wonderful company in the world, The Youngstown Sheet and Tube Co., and you will wonder why I ever left it. To tell the truth I never did anything that was harder, as we had an organization from the president down that can't be beaten anywhere. However my present position was offered me. It presented: 1. A new and interesting field; 2. My home town. Of course the latter item had more consideration just now than at any other time as my only brother at home is getting ready to go to France and expects to have a mail address "Somewhere in Germany" before another year rolls by. My new company is a good staple one and from what I have been able to see of things since September 1 when I assumed my new duties, the work is going to be equally as interesting as that with the Youngstown Sheet and Tube Co. Give my best regards to any of the boys you see. I hope to see some '06 men at the Technology Club of New York soon.

"Queer feeling" is right Stewart, only the secretaries feel "queerer." For our part we do not propose to let it happen again and with the help of a few more of the class we feel sure that it won't.

That April 1917 REVIEW was certainly rough on 1906. We will admit our shortcomings in failing to supply class notes, but when we were very careful to proudly submit to the REVIEW a copy of our Ten Year Book and then find it referred to in the last item under "Book Reviews" as the Ten Year Record Book of the Class of 1896, that was certainly "rubbing it in."

Whenever we send out a notice in connection with class affairs there are always some of the envelopes returned because the man for whom the notice was intended has left for parts unknown and has failed to notify the alumni office. As a result of our last notice the following are among the missing, H. V. Coes, II, A. W. Geist, Jr., VI, and G. C. Noble, IV. We hope to be able to locate these men before long without spending too much of the class fund for rewards.

We are in receipt of the following new addresses: Mr. Edward M. Eliot, VI, 4330 Washington St., St. Louis, Mo.—Mr. Norman P. Gerhard, I, care of Henry Wells, Saugerties, N. Y.—Mr. George M. Henderson, III, Box 3, Weston, Mass.—Mr. Harold G. Hixon, VII, Mineral Point Zinc Company, 1111 Marquette Building, Chicago, Ill.—Dr. Claude S. McGinnis, VIII, Coloma, Mich.—Mr. Arthur Neale, V, 534 Henry Building, Seattle, Wash.—

Mr. Arthur P. Watt, III, Consulting Metallurgist, Missouri Metals Corporation, Mine La Motte, Mo.

1907.

BRYANT NICHOLS, *Sec.*, 10 Grand View Road, Chelsea, Mass.

HAROLD S. WONSON, *Asst. Sec.*, 376 Blair Road, Washington, D. C.

The following item appeared in the Philadelphia *Public Ledger* on September 27, 1917:

The Kansas State Agricultural College has come to Chicago for a man to help plan better homes and buildings in that state. Cecil F. Baker, an architect, has accepted an offer to head the department of architecture in the college at Manhattan, and has already entered upon his duties in the new position.

Professor Baker is a graduate of the University of Illinois and of the Massachusetts Institute of Technology, 1907, in addition to which he has studied in Europe and has been engaged in private practice in Chicago for some years past.

The *Engineering News* contained the following on August 2, 1917:

Prof. James M. Barker of the Civil Engineering Department, Massachusetts Institute of Technology, has been retained as consulting bridge engineer by the Massachusetts Public Service Commission.

Ralph Crosby's address is now 123 Leland Ave., Plainfield, N. J.—Early in September "Nat." Middleton received his commission as a captain of engineers, Officers Reserve Corps, U. S. A., and was placed on active duty.—James G. Moore, 1017 Grant Building, Atlanta, Ga.—Hugh Pastoriza writes as follows, from an address, 1800 E. St., N. W., Washington, D. C.:

For the past two years I have been employed with Coffin & Burr, Inc., a firm of investment bankers in Boston, who are primarily interested in public utility bonds. I have been pretty well all over the country examining properties for them and have found the work exceedingly interesting. With the coming on of the war, I applied for the Officers Reserve Corps, and have landed in the Ordnance Department here in Washington, in a division where we are rushing out designs of big guns for use in Europe.

—Robert K. Taylor has left the Boston Transit Commission, and has gone into the contracting business in partnership with another man.—A letter from another classmate in New York gives the following information about John J. Thomas:

I ran across "Captain" Johnny Thomas, who is now consulting munition engineer for the American Can Company, the other day and find he is a very prominent member of his home town—Westfield, N. J. In view of his experience with the Coast Artillery and the Ordnance Department of the U. S. Army, he is the man to whom Westfield looks for its military preparedness. He is chairman of the Military Committee of the Westfield Branch of the National Security League and is responsible for what is called the Westfield Rifle Club. There are at the present time approximately 200 members and they have built a 500-yard outdoor range and a 75-foot indoor range for target practice. Last Christmas he was presented with a 38-calibre Smith & Wesson target revolver by the members of the club. In addition to this he is in charge of the Westfield special police and is major of the Westfield battalion which was recently formed for the purpose of training the men in Westfield in military science. There are two companies in the battalion and he expects to bring it up to full war strength in a few weeks.

H. S. Wonson writes in part as follows:

I've been in Washington since May 7 detailed with the Council of National Defense. On July 9 they made me a major, Quartermaster U. S. Reserves, and assigned me to the same job. Busy as can be but the work is mighty interesting and I come in contact with some very big men. Work closely with Mr. Julius Rosenwald, T. Brookings, etc., and have attended conferences with the secretary of war, chief of the general staff, etc. Have also testified before committees of Congress, so am having a wonderful experience.

His address is 376 Blair Road, Takoma Park, Washington, D. C.

1908.

RUDOLPH B. WEILER, *Sec.*, care The Sharples Separator Co.,
West Chester, Pa.

L. T. COLLINS, *Asst. Sec.*, care Marshall & Co., 70 State Street,
Boston, Mass.

I. On the Part of the Secretaries

TO THE CLASS OF 1908,

MASS. INSTITUTE OF TECHNOLOGY.

August 28, 1917.

Since the last class meeting I have made a change and am now connected with my father in the shoe business. For the present my headquarters will be Portland, Maine. It is essential that the resident secretary of the class of 1908 be located in the vicinity of Boston and for this reason I hereby tender my resignation to take effect at the time of the class bi-monthly dinner on Sept. 11, 1917.

I want to thank you all for your support, which has made my duties as secretary a pleasure and to state that I greatly appreciate the assistance I have received, especially from the members of the various committees which have given such good work on every occasion.

The class of 1908 I believe now holds the record as the most "get together" and "wide awake" class from the Institute. It is my sincerest hope that the class continue to hold this record. To my mind one of the surest ways of doing this is to continue the bi-monthly dinners. I believe that every other month is just the right time spacing since it brings them often enough to be interesting, but not so often as to cease to be interesting.

Mr. Collins' plan of having something of special interest at each dinner should be continued. Anything which makes the meetings more interesting and tends to increase the attendance is worth the effort. A ten minute paper by some member of the class on some phase of his work would be another way to make the dinner more attractive. It is well worth while to know something about what the other fellow is doing and a little serious thought would only add to the pleasures of the following bowling match or whatever amusement is taken up after each dinner.

Regretting that it has been necessary for me to resign this office, the duties of which have been a great pleasure to me, and looking forward to seeing you often at the bi-monthly meetings, I am,

Sincerely yours,

CHARLES W. WHITMORE,
Baxter Block, Portland, Maine.

The tenth consecutive season of bi-monthly dinners was opened at the City Club, October 9, at 6.45 p. m. This record for class unity, we believe, is not equalled or even approached by any other class and is, therefore, a record to be proud of. The following were present: F. T. Towle, B. W. Cary, H. C. Schriefer, Lincoln Mayo, C. W. Clark, S. F. Hatch, E. J. Beede, W. D. Ford, L. B. Ellis, E. H. Newhall, H. L. Carter, E. I. Wells, Carl H. Bangs, L. T. Collins.

The resignation of Whitmore as assistant secretary, printed above, was read and accepted with regret. He was then given a rising vote of thanks for the deep interest which he has always taken in every matter pertaining to the welfare of the class of 1908. L. T. Collins was elected assistant secretary to fill the vacancy thus caused. He appointed Beede, Cary and Schriefer a committee to look after the entertainment for the next meeting.

A. C. Nichols announces the arrival of Alice Hope Nichols Oct. 28 at Clearwater, Florida.

II. *Roll of Honor*

The information continued herein has been gathered from many sources and makes no pretense as to completeness. The secretaries would be very grateful for any information not here contained, as on account of the extreme modesty of our members, few of the names herewith were reported directly.

Capt. William H. Toppan, Coast Artillery Section, Officers' Reserve Corps.

Lieut. M. E. Denny, lieutenant of engineers, Leven Shipyard, Dunbarton, Scotland (in the Scotch service).

Capt. H. A. Rapelye, O. R. C. (Infantry).

Herbert T. Gerrish is in Company 2 E, R. O. T. C., Camp American University, Washington, D. C.

H. B. Luther, Bureau of Construction and Repair, Navy Dept., Washington, D. C.

Raymond Ferris is in charge of the Washington office of the M. I. T. Committee for National Service.

L. A. Loomis is in the supply division of the Navy.

P. R. Powell, first lieutenant Company 6, American University, Washington, D. C.

William B. Given, Jr., first lieutenant, 69th Regiment, Camp Mills, Mineola, N. Y.

III. *Matrimonial*

A. M. Cook was married October 3 to Miss A. Marguerite Mosman, of Chestnut Hill. Link Mayo was best man and Langdon Coffin was one of the ushers. They will reside in Chicago.—Harold P. Gurney was married to Miss Grace I. Tinehout. The date is not reported.—The engagement is announced of Lieut. William B. Given, Jr., to Miss Dorothy Arnold Weiman.—Austin B. Mason was married September 15 at Chestnut Hill to Miss Margaret Bliss. Mason is connected with the Aviation Camp at Garden City, Long Island, N. Y.

IV. *Letters*

From R. C. Rice, 25 Federal Building, Topeka, Kans., under date of July 14, 1917.

You may care to know that the above is now my new address. It should be changed in the REVIEW, as I have been out here since June 1, 1917. Shortly after the

last class dinner that I was very glad I could attend, I was detailed here to take charge of the work in coöperation with the Kansas Water Commission which was created by the last state legislature to investigate water problems in Kansas and to devise some effective means to control the flood that caused such havoc in the eastern part of the state. So if you hear of me floating down into the Mississippi some fine day on a log, you will know that I have made practicable use of my surf board experiences in Hawaii. I suppose you are now settled in Boston or vicinity again and have written down your South American trip as past history. Kindly extend my best regards to all the fellows.

From Howard E. Batsford, Syracuse, N. Y.

I am now located on experimental work with the Solvay Process Co. in this city and all mail addressed to that plant or the above city address will reach me till further notice.

For two months after I saw you fellows at the class dinner I was laid up with inflammatory rheumatism, but have now entirely recovered, and started in work August first with a mind clear (after four months' rest) and a body full of energy and "pep." Remember me to any of the boys you meet.

Our remarks about class news must have gotten under G. M. Belcher's skin from the following excerpts from his letter.

The remark about the dearth of class news makes me wish I had some to offer, but it is rather scarce. Dick Collins came up here in his "flivver" a few weeks ago, and I spent an evening with him and his wife in their apartment at Elmhurst, L. I., last month. Emery was in town today and tells me that Colson is as bald as Fred Cole which ought to be important enough news to put in the REVIEW.

V. *New Addresses*

G. M. Belcher, 5 Culver Court, Naugatuck, Conn.—Miss Mabel Keyes Babcock, 112 Charles River Road, Cambridge, Mass.—W. J. E. Barcus, care General Chemical Co., 25 Broad St., New York City.—Howard E. Batsford, 406 Roberts Ave., Syracuse, N. Y.—Frank K. Belcher, care U. S. Shipping Board, Lexington St. Bldg., Baltimore, Md.—Ygnacio S. Bonillas, American Metal Co., Casilla 125D, Santiago, Chile.—Harry L. Burgess, care Southwestern Bell Tel. Co., Boatmen's Bank Bldg., St. Louis, Mo.—Charles C. Kinsman, 9921 Longwood Drive, Washington Heights Sta., Chicago, Ill.—Joseph S. MacNutt, Hillcrest Inn, Ogunquit, Me.—William H. Medlicott, care Continental Ins. Co., 80 Maiden Lane, New York City.—Joseph T. Mohn, 244 Madison Ave., New York City.—Charles H. Shapleigh, Eastham, Va.—Carroll D. Steele, 1 Chester Terrace, Duluth, Minn.—Charles W. Whitmore, Baxter Block, Portland, Me.—Frank W. Willey, 121 Opera Place, Cincinnati, O.

VI. *Addresses Wanted*

Alan F. Edge, J. H. Sinclair, George J. Venn, K. C. Bouch, R. T. Pollock, J. K. Heydon, F. J. Friedman.

1909.

CHARLES R. MAIN, *Sec.*, 201 Devonshire Street, Boston, Mass.
GEORGE A. HAYNES, *Asst. Sec.*, 530 Atlantic Avenue, Boston, Mass.

The vacation months have slipped by pretty rapidly this year and the time for the class roundups will be with us soon. In spite

of the "H. C. L." we are reading so much about now-a-days, maybe we can save up a few nickels and attend the first dinner which is scheduled for November 14. Let's start the year right with a large attendance and keep it up through the winter. The second Wednesday in the odd months is the day. Jot it down in your memory for future reference.

The secretary was glad to receive a long letter from W. Craig Ferguson, II ("Fergie"). He was commissioned a first lieutenant in the Ordnance Officers Reserve Corps in July, and has been ordered to Manila, P. I., for active duty. He says:

Until called I was connected with the Walla Walla Iron Works as treasurer and assistant manager, engaged in manufacturing and repairing harvesting machinery. This is a wheat section and the Government's price of \$2.20 a bushel will give the farmers the greatest financial return they have ever had. This will mean extra prosperity for everyone here. I will greatly appreciate it if you have time to send me the names of any of the boys that are in the Islands. Send mail to me here and it will be forwarded. When I am located there I will send you a line. Roy Anderson, an '09 man for two years, is here in Walla Walla. He is chief engineer at the Washington state penitentiary. Eugene Hunt, another '09er, left here about a year ago for Los Angeles and I understand sails this month for China on some machinery business. Have seen few of the '09 boys as this Inland Empire is off the regular path. They all go to the larger coast cities.

Remember me to any of the fellows that you see and tell them that mail sent to Walla Walla, Wash., will reach me.

A few days ago the following announcement was received: "Mr. and Mrs. William W. Baker announce the marriage of their daughter Mildred to Mr. William Craig Ferguson, lieutenant Ordnance Corps, U. S. R., on Saturday, the twenty-ninth of September, one thousand nine hundred and seventeen, Walla Walla, Washington." Congratulations "Fergie."

The secretary is also glad to acknowledge the receipt of the following from S. F. Barnett, I, and to extend to him the congratulations of the class. Barnett says:

Have returned East after spending a year in San Francisco and Los Angeles. I was connected with a concern promoting internal combustion engine of the latest type. Received some stock but no money.

I also wish to announce that I was married on August 19 to Mrs. Grace Gray Griffith of Anderson, Cal., in San Francisco. We shall dwell at 241 Adelphi Street, Brooklyn, N. Y., after October 5.

The following clipping appeared in the *Scranton (Pa.) Republican* of September 6, 1917:

Miss Dorothy H. Innes of Wilkes-Barre and Lieutenant Arthur H. Turner of the U. S. Marines and son of Mr. and Mrs. C. S. Turner of Wilkes-Barre, were married Saturday, September 1, in the Episcopal Church of Our Savior in West Philadelphia by the Rev. Edwin Booth Young, D. D. The bride is a graduate of Wilkes-Barre High School and of the Beechwood Seminary, at Jenkintown. Mr. Turner is a graduate of Harry Hillman Academy, Princeton, Boston Tech. and the United States Marine Officers Training School. He is stationed with the Sixth Regiment, United States Marine Corps, in Quantico, Va.

Thomas C. Desmond, I, is president of the Newburgh Shipyards, Inc., with offices in New York. A recent New York paper

says: "Desmond is well acquainted with Colonel Roosevelt and, at the request of Colonel Roosevelt, he organized the regiment of engineers for the colonel's proposed division to go to France. Several of the men of the Roosevelt engineering division are now working in the new shipyard, and President Desmond plans to bring a large number of others, as soon as the work expands.

Speaking on this subject, Mr. Desmond remarked that he had over 3,000 enrolled in his office for the regiment. "I expect that a large number of these will come with me in the shipbuilding work," he continued, "as we regard this work of the highest patriotic importance."

WAR NOTES

Lynn A. Loomis, III, has just received his commission as first lieutenant in the Sanitary Corps of the United States Army. He has been connected with the Plimpton Press, at Norwood, Mass.

F. S. Perry, VI, instructor in the Department of Electrical Engineering, has resigned to accept a commission in the Ordnance Officers Reserve Corps.

L. C. Eddy, Jr., VI, has been commissioned second lieutenant in the Engineers Reserve Corps. He has just published a new song, "United States of America," the chorus of which is as follows:

"Unfurl Old Glory, let it wave,
And cheer with hearty tone,
United States, Columbia,
America, our home."

Captain Bradley Dewey, X, has been promoted to the rank of Major, Sanitary Corps, and in addition to his other duties will make enlistments for the Sanitary Corps. Before the war Dewey was a chemical engineer with the American Sheet and Tin Plate Company.

E. L. Ryerson, I, is connected with the Air-craft Production Board.—A. B. Morrill, XI, is assistant to Morris Knowles, 91, engaged on the Annapolis Junction (Md.) Cantonment.—James J. Tobin, XIII, is at Camp Devens, Ayer, Mass., where he is assisting the construction quartermaster.—Paul H. Lazenby, I, is captain in the 2d Canadian Pioneers, and is in active service at the front.

1910.

DUDLEY CLAPP, *Sec.*, Box 1275, Boston, Mass.

Nearly all the news for this department at present relates to the war, for so many Tech men are in the service that they dominate the news columns of the daily papers as well as the pages of the REVIEW. There are a few social events to record, and it is hoped that all classmates, whether in military or civil life, will send in some account of what they are doing to make the world better and happier. Of course you all remember Henry M. Schleicher.

Well, he is at Room 8-301, Department of Mining Engineering and Metallurgy, at Tech, and writes as follows: "I am now in charge of the United States Smelting Refining & Mining Company, Central Research Laboratory, and will be glad to have any of the fellows who get up this way drop in."

Hear the merry, merry marriage bells ring in the following:

Mr. and Mrs. Henry W. Bliss of Chestnut Hill have announced the engagement of their daughter, Margaret, to Austin B. Mason of Boston. Miss Bliss is a member of the 1916 Sewing Circle and of the Vincent Club. Mr. Mason is a son of the late Mr. and Mrs. Mortimer B. Mason of Boston. He was graduated from Harvard in 1908 and Massachusetts Institute of Technology in 1910 and has recently returned from France where he served with the American Ambulance.

On September 15 Miss Bliss married Mason at the Church of the Redeemer in Boston, Rev. Lucien Rogers officiating. The happy bridegroom is now at the engineering aviation field at Mineola, L. I.

More wedding bells in prospect. Read this from one of our dailies. Miss Chandler is a fine looking girl, judging from the picture that was printed with this item:

Announcement has just been made of the engagement of Miss Gladys Chandler, the only daughter of Mr. and Mrs. Willmond K. Chandler of 77 Maple street, Auburndale, and George Bergen Reynolds, Tech, '10, of Rochester, N. Y.

Miss Chandler is one of the best known members of the social life of that town, and has taken prominent part in Red Cross and social activities for several seasons past. She was graduated from the Newton High School in 1906, and later attended Simmons College. Her father is the president of the C. A. Browning Company, millinery and shoe trimming concern, of Franklin street, Boston.

Mr. Reynolds is the only son of the widow of the late Rear Admiral J. F. Merry, U. S. N., formerly of Somerville, who died last year. He is a member of the Theta Delta Chi Fraternity and Osiris. He is connected with the Eastman Kodak Company of Rochester.

For war news the following notes will interest every member of the class:

Tyler Carlisle of Strong, Carlisle and Hammond, Cleveland, is assistant to Frank Scott, head of the Munitions Board. Carlisle is rounding up manufacturing plants and machinery to help speed up the production in his department.

F. F. Bell has been commissioned first lieutenant (supply officer) in the Aviation Section of the Signal Corps.

Thomas A. Roper is engaged upon work on ordnance equipment for aeroplanes, and has been recommended for a commission as first lieutenant in the Ordnance Officers' Reserve Corps.

A few weeks ago Major John Bigelow, U. S. A., retired, received a cable dispatch stating that his son, Captain Braxton Bigelow, of the Royal Engineers, 70th Field Company, British Army, is missing. Captain Bigelow was a grandson of the late John Bigelow, minister to France under Lincoln. Captain Bigelow was graduated from Harvard in the class of 1909 and took a course at Tech the following year. He was formerly connected with a London banking firm.

The Tech publishes this account of Stewart's return:

A reception was given yesterday in honor of Edward Stewart, '10, who has just returned from doing sanitation work in Europe as head of the American Red Cross Relief Committee. The original committee called for from Washington Red Cross under Dr. Strong was composed of fifteen men from Technology and Harvard and the Harvard-Technology School for Health Officers. The two men from Harvard were Schoolmaker and Hazelhurst, and from Technology-Harvard School for Health Officers Edward Stewart, '10, Dr. Mitchell, Dr. Mendelsohn, Dr. Osborn, Dr. Corneliuss. To these were added men from the Institute, namely, Carl Buck (formerly of Dartmouth), Albert Buck, '13, Charles Fox, '14, G. W. Bakeman, '13, Elliott Gage, '13, E. H. Magoon, '14, M. H. Harrington, '14, R. D. Bates, '14. Besides these were men from other colleges.

Professor Sedgwick, head of Course XI, spoke of the work of the Relief Committee, and after explaining the absence of President MacLaurin of the Institute, introduced Dr. Rosenall, director of the School for Health Officers. Dr. Rosenall spoke of the work done by the Relief Committee in the pioneer work of protecting the European countries from poor sanitation. Professor Spofford then addressed the gathering and welcomed the committee back to the United States.

Mr. Stewart was next called upon and his talk consisted of an interesting account of the work done in the beginning under Dr. Strong. A great majority of the work was done in Serbia where the sanitary conditions were the worst. He gave an account of the methods pursued in the stamping out of the epidemic of typhus. To give an idea of the poor water condition, he told of one case where a member of the committee dug a well. The French upon entering the town put a sign on it claiming, "This is the only pure water in town." From here, Mr. Stewart outlined the actual process of stamping out an epidemic. The soldiers are bathed, given antitoxin, and sprayed with kerosene. In the meantime a detachment is sent to fumigate the barracks. Several of the men of the committee who had formerly served in Panama attended to the mosquitoes and sprayed the pools around the outskirts of the cities.

The secretary hopes that news will continue to roll into his box in the Boston post office. Don't forget the number, 1275. He has been commissioned first lieutenant, Sanitary Corps, N. A., and has been assigned to the gas defence service, but whatever news of the Mitten Class comes will be published for the benefit of all the members. Remember the words of the acting editor of the *REVIEW*: "Life is moving rapidly these days; events pile up; every hour another Tech man drops his business and goes into service." So just tell your classmates about your service, or your business, or your marriage, or your babies. All are interesting subjects.

On October 8, William Elliot Armstrong arrived to bless the home of Mr. and Mrs. Kenneth P. Armstrong of Washington, D. C. Armstrong is especially anxious to have this announcement inserted to this number as he does not wish any of his classmates to have anything on him. He says that V. T. H. Bien, also of Washington, has had the nerve to strike out for himself in contracting and is getting away with it very nicely, enough so as to be able to sport an auto—a regular one, not a flivver—which is quite beyond the means of a poor government "clerk" like Armstrong in these war times. But the latter is cheered by the thought that his classmate gives him a ride occasionally.

1911.

ORVILLE B. DENISON, *Sec.*, 63 Sidney Street, Cambridge A, Mass.
 HERBERT FRYER, *Asst. Sec.*, Amer. Int. Ship. Corp., 140 N.
 Broad St., Philadelphia, Pa.

11—11—11

AMERICA!

33—SERVICE STARS—33

(As of October 15, 1917.)

<i>Name</i>	<i>Course</i>	<i>Commission</i>	<i>Service</i>
H. B. C. Allison	X	1st Lieut.	Aviation Section of S. O. R. C.
H. E. Babbitt	XI	Capt.	Assigned to Fort Leavenworth.
E. E. Besse	II	1st Lieut.	O. O. R. C.
Paul Burdett	II		Training at Fortress Monroe, Va., in O. T. C. of C. A. C.
P. L. Caldwell	I	1st Lieut.	Supply Officer in Aviation Section of S. O. R. C.
H. C. Davis, Jr.	VI	1st Lieut.	Ordnance Department, Benicia Arsenal, Benicia, Cal.
J. J. Devlin	III	1st Lieut.	301st Engineers at Ayer, Mass.
G. C. George	I	1st Lieut.	Engineers O. R. C.
Louis Grandgent	IV	Capt.	101st Infantry, American Expedi- tionary Force.
J. S. Gravely	V	Capt.	O. O. R. C.
J. A. Herlihy	II	1st Lieut.	S. O. R. C. In charge of 109th Squadron, Camp Kelley, San Antonio, Tex.
W. F. Herrick	II	?	U. S. Army Aviation.
W. K. Hodgman, Jr.	II	Sergt.	24th Co., C. A. C. at Fort Banks, Boston, Mass.
F. C. Jewett	I	Quartermaster	10th Deck Division (Marblehead) on board U. S. S. <i>Nebraska</i> .
Reginald L. Jones	VI	Capt.	O. R. C. (Branch not known.)
George C. Kenney	I	?	3d Foreign Detachment, Aviation Section, Signal Corps, Mineola, L. I.
Edward Kenway	I	Capt.	Assigned as Commander of 64th Aero Squadron.
C. P. Kerr	II	?	On staff of Aero Engineering Divi- sion of Aviation Section of Signal Corps.
R. W. Lewis	V	?	Engineers O. R. C.
H. S. Lord	II	?	Engineers O. R. C.
R. H. Lord	VI	1st Lieut.	Ordnance O. R. C.
H. L. Manley	I	1st Lieut.	O. O. R. C. Assigned to Camp Doniphan, Okla.
J. L. McAllen	III	1st Lieut.	Engineers O. R. C.
L. W. Perrin	I, II	Capt.	Infantry Section O. R. C.
R. H. Ranger	VIII	2d Lieut.	F. A., U. S. R. American Expe- ditionary Force.
S. H. Scribner	I	Sergt.	R. R. Corps of Engineers.
D. R. Stevens	II	?	In charge of U. S. Navy Aviation School at Akron, Ohio.
C. H. Sutherland	I	?	Engineers O. R. C.
A. F. Underhill, Jr.	VI	2d Lieut.	F. A., Section O. R. C.
R. D. Wells	II, VI	1st Lieut.	O. R. C. (Branch not known.)
E. J. Whitcomb	X		Training at "Second Plattsburg."
Robert O. Wood	VIII	?	Aero-Mechanician in Navy Avia- tion Squadron.
A. W. Yereance	I	?	Engineers O. R. C.

In the foregoing table your secretary has, to the best of his knowledge, arranged the classmates he knows to be in the service at mid-October. In perfect synchronism with the trend of the times this list is of course being added to rather rapidly, but every man entering the service does not necessarily come to the attention of your secretary, hence such a list is never complete.

Strangely enough there is added significance to the well-known "11—11—11" at this writing, for there are three times eleven or thirty-three '11 men known to be in the service.

As seems most fitting, priority is given to the war activities of the class in these notes.—During the summer H. B. C. Allison, X, was carrying on extensive research work upon special tool steels for ordnance and other purposes in the research laboratories of the General Electric Company at Schenectady. Later he accepted a first lieutenant's commission in the Aviation Section of the Signal Corps.—Capt. H. E. Babbitt, XI, has been assigned to Fort Leavenworth, Texas.—"Gus" Barker, VI, your secretary's longtime side-kick, is now in Washington where he is acting as purchasing agent for the Signal Corps, in the Construction Division. He is extremely anxious to see over-seas service and will try for a commission. In a recent letter he mentioned the fact that he ran into Joe Aaron, another VI man, in Washington, but he neglected to say what Joe was doing there.—"Cap" Besse, II, is at this writing in Washington, he having accepted a first lieutenant's commission in the Ordnance Department.—Paul Burdett, who was with the class a short while, is at present in training at Fortress Monroe, Virginia, in the officers' training camp of the C. A. C.—George B. Cumings, VI, is now a civilian employee in the U. S. Navy with the inspector of electrical machinery in Quincy, Mass.—Jack Devlin, III, attended the American University in Washington, receiving a first lieutenant's commission. He has been assigned to Camp Devens at Ayer with the 301st Engineers.—Your hustling assistant secretary, yclept Herbert Fryer, has surely been one active chap since the declaration of war in April. While still on his former job, with Babcock and Wilcox, Bert was pretty active in numerous ways in the interest of the Government. Finally in mid-summer he went to Washington where he entered the purchasing department of the Cantonment Division. His career to date from here on is best stated in his own words, taken from a recent breezy letter:

You would have had to address me as Captain Fryer had I accepted my commission, which now lies in quiet repose amidst the greatest bustle you ever saw in your life. You talk about things moving—this is the place! As a matter of fact I have been going seventeen hours per day since July 29.

The greatest experience I ever had or ever expect to have been my share. I was in Cantonment Division in Washington in charge of purchasing the materials for heating and power of all the camps and sundry buildings for the Council of National Defence. The work covered the purchase and expeditioning of boilers, piping valves, pipe covering, boiler fittings, radiators, plumbing material, tanks, etc. Each purchaser followed all material until it arrived at the camp.

The hugeness of the whole job is not appreciated except by one on the job. For example, a laundry for one camp, without buildings or labor to install, amounted to about \$80,000. The boilers for the base hospital of each cantonment amounted to 1,500 hp. and cost, with all equipment for heating, approximately \$150,000. Everything is on the same huge scale. Cots, for example, for all the camps cost over a million dollars.

I received a commission as captain in the Quartermaster Corps but did not accept,

due to an offer to go with the American International Shipbuilding Corporation at Philadelphia. This company has contracted to build yard for 100 ships, meaning 50 way and 50 outfitting ships. The plant will cost approximately \$50,000,000 and the ships are to be worth \$1,500,000 apiece.

At present I am chief buyer, handling an organization of about 40 men. I have had a fine two weeks helping to hire and organize the purchasing department. There will eventually be about 60 men in the organization. I am handling all mechanical equipment personally, as well as keeping general oversight of the other work. The greatest chance I ever had!

Looks like Bert will not be acclimated for some time with such activity in a so-called Slowtown!—G. C. George, I, is another '11-er who received a first lieutenant's commission at the American University in Washington.—Louis Grandgent, remembered by many as a mild-mannered architect, is no longer such, 'twould seem. He is at present in France, where he is a captain in the 101st U. S. Infantry, having received his commission at Plattsburg.—Capt. J. S. Gravely, V, has been temporarily assigned to the Small Arms Division, Ordnance Corps, at Washington.—Word has reached the secretary that Louis Harrigan, XI, is reported as having sailed for France. Details are lacking.—Jack Herlihy, II, has received a commission as first lieutenant in the S. O. R. C. and has been placed in charge of the 109th Squadron at Camp Kelley, San Antonio, Tex.—Bill Herrick, II, graduated September 28 from the ground school, U. S. Army Aviation at Tech. Where he has been assigned is not known to the secretary.—Bill Hodgman, Jr., II, is at present a sergeant in the 24th Company, C. A. C. of Boston, stationed at Fort Banks.—“Heine” Kenney, I, enlisted June first, and is a member of the 3d Foreign Detachment, Aviation Section, Signal Corps, Mineola, L. I. He was in training for quite some time at the Tech school for aviators.—Edward Kenway, I, has been assigned as commander of the 64th Aero Squadron, present whereabouts unknown.—Poor old L. W. (meaning “light (?) weight”) Scotty Kimball, VI, attended Plattsburg, but at the final summing-up failed to qualify physically. Tough luck, Lil Pal! Eat and grow thin!—The following clipping from the *Oregonian*, Portland, Ore., is self-explanatory:

Information reached Portland yesterday that John Lavelle McAllen, son of Dan McAllen, of this city, had received his commission and been sworn in as a first lieutenant in the Engineers' Corps. Mr. McAllen received his military training from a West Point officer while a student at the Massachusetts Institute of Technology, where he was graduated as a mining engineer in the class of 1911. He is now employed by the Guggenheim interests in Alaska and is there awaiting his call to active service.

Dan McAllen also has two other sons in the service of their country. Edward McAllen is on the *South Dakota*, now somewhere along the Atlantic Coast, while Mark McAllen is on the *Saratoga*, which is presumed to be on the Pacific Ocean.

Good for you, Jack!—H. L. Manley, I, was transferred from Plattsburg in July to Springfield Armory for work in the machine-gun school. He has since received a first lieutenant's commission, O. O. R. C., and been assigned to Camp Doniphan, Okla.—Dick Ranger, VIII, received a second lieutenant's commission at Platts-

burg and has been sent to France as military observer, Field Artillery Section, having sailed August 29. The following letter has been received from him, indicating his safe arrival, for which his classmates rejoice:

LIVERPOOLE, ENGLAND, Sept. 6, 1917.

Dear Friends:

It's night, and there are lights coming up over the horizon. As no ships carry lights of any sort, it must be land. So we shall very likely wake up tied to the dock.

It has all happened very quickly. I reported a little over a week ago to have accommodations arranged for getting "Over There" and the next day was on the briny. The ocean was quiet, too quiet for the start. It was like old Lake Champlain at Plattsburg. But it all changed very suddenly and then hardly anyone came down for breakfast, or any meals for the next couple of days for that matter. But since, we have managed to eat everything in sight and is has tasted mighty fine too. I'm afraid we shall fare a little less well soon.

The ocean surely is a great expanse. Of course there were many voluntary submarine lookouts on the decks all the time, but we hardly saw anything, let alone undersea raiders, or over. One day the officers were a little suspicious of a brig that appeared to be taking down its sails and preparing for action, but then they decided it was only a mirage as the boat sailed harmlessly by.

We did have a tragedy. One of the crew they think went out of his head. He jumped overboard. Life buoys were thrown out immediately, but on our circling around nothing could be seen, although every care was taken and a boat manned and got in readiness quickly.

Most of the officers on board are "medics." There are only a dozen or so of "us line officers." These medics are a mighty good crowd, quite young, and never saw anything military three weeks ago. But they are trying hard and I am sure will be right there in their great field.

If you get this you will know that we have arrived safely in good old England—so here goes for the last night aboard. Sweet dreams.

RICHARD H. RANGER, 2d Lieut., Field Artillery, U. S. R.,
American Expeditionary Force, via New York.

More power to you, Dick, old boy!—Don Stevens, II, is at present in charge of the flying field and U. S. Navy Aviation School at the plant of the Goodyear Tire and Rubber Company in Akron, Ohio. Here the blimp type dirigibles are being erected under his supervision and U. S. Navy men are being trained in free balloon flying, kite balloon flying and dirigible balloon flying. The men are being trained by R. A. D. Preston, '10, whom many 1911 men doubtless remember. A detail of 80 U. S. Navy men are encamped.—E. J. Whitcomb, X, is now training at the second encampment at Plattsburg.—Word has reached the secretary that R. D. Wells, II, VI, has received a first lieutenant's commission in a branch, not designated, of the O. R. C.—Bob Wood is in the service as aero-mechanician in the Navy Aviation Squadron. Early in October he wrote that he "expects to fly soon."—At perhaps too great length the secretary has here and in the notes for the July REVIEW endeavoured to present all known news of 1911 war activity. This method will be adhered to in the future as fast as news reaches the ears or eyes of yours truly.—The secretary arranged a class dinner for the evening of October 11 and happily chose upon the faculty room of the new Walker Memorial as a fitting rendezvous for such an event. In this connection put

down a chalk mark for our illustrious class. We are the *first* alumni class to have a class dinner in the new Walker Memorial! The service furnished by Mrs. McLean, superintendent of the dining-room, was certainly of the best and a more congenial or appropriate place to meet and eat could scarcely be found. There were twenty men present, as follows: Bill Burleigh, Bill Buckley, O. S. Clark, L. D. Cushman, George Cumings, Fred Daniels, Dennie, Joe Gershberg, Tommie Haines, F. C. Harrington, Harold Jenks, Art Leary, Charlie Linehan, Roy MacPherson, Carl Richmond, Otto Schurig, D. J. Smith, O. W. Stewart, Ted Van Tassel and Frank Wood. So successful and enjoyable was the experiment tried at the dinner last June, of having each man render an account of his "stewardship" since leaving Tech, that the secretary announced at the start of the dinner that there was to be another "draft" as a feature of the evening's entertainment. And so each man who had not "reported" at the June dinner (there were eleven of them there) was given a "red ink" number and called upon in the resulting "order of liability." Here's what the men told.—L. D. Cushman, IV, was the "258" of the evening and he said he was glad to be among Tech men again. He was only with the class a short while and so didn't get to know many of the fellows. He has been busy in the field of architecture ever since leaving Tech. He is with James H. Richie, a Boston architect, and has been engaged mostly in academic work, having recently finished a high school in Norwood.—F. C. Harrington, I, was next in line and he entertained the gathering a lot, for he has just returned from quite a stay in Cuba, where he was engaged in railroad work, which branch of engineering practice he has been following since leaving Tech. Early in September the secretary was favored with a splendid letter from Harrington, and there seems no better way to acquaint the class with his activities than by publishing practically the whole of the letter:

Railroad work has taken me in a good many places and I suppose that I have pursued the railroad end of the game about as consistently as any of the '11 men. Before entering the institute I had no little training and experience in railroads generally. After finishing at the Institute I took a job with the Erie in New York in preference to one I turned down in Portland, Ore. I worked out of the New York office on jobs of endless variety, preliminary surveys, location, grade crossing elimination with its hearings and conferences and even a little hydraulic work in connection with a water damage suit.

In September, 1912, I went to North Carolina as resident engineer on construction and saw the job through to the end. Valuation work under the I. C. C. then broke loose in January, 1914, all over the country and as a beginner the Eastern District dropped down on the Norfolk Southern Railway for whom I was then working on the new construction just finished.

Valuation in 1914 was the salvation of thousands of engineers in the face of the retrenchment brought about by the war and I fell in with the Southern Railway under the special engineer on their valuation proposition. There was no end of surveys to be made on the entire system covering lines in all of the Southern States and representing a mileage of 7,000 miles. Life on that job was hell from beginning to end. No definite headquarters were afforded and we practically lived on the

railroad proper. We put up anywhere and ate and slept at rotten hotels or farm houses of the worst sort.

When the I. C. C. began the inventory of the Southern's property they started with the Georgia Southern & Florida Railway, an allied line. I went there in the fall of 1914 to make a study of some 110 miles of road from Valdosta, Ga., to Jacksonville, Fla., and the new activity was a pleasure. With the beginning of the new year the federal inventory parties arrived and then the real work began. I was then acting as pilot engineer for the railroad, a rather ignoble position in the eyes of the inventory parties. With that beginning I roamed up and down the system on inventory of roadway, bridges and buildings, and what not.

From my New York connections I was offered in December, 1916, a position on the location of a mine railroad near Cienfuegos for the Davison Sulphur & Phosphate Company. The Davison project is a good one but the world situation has had its effect on us. Perhaps more than the war in Europe the local situation has caused us a good deal of annoyance. The uprising of the Liberales with their sympathizers in February played havoc with us. I was located in the mountains with five Americans and eight or ten Cuban machetemen in my party when six well armed bandits pulled up to camp. We exchanged a few words, mine were mostly profanity, and they relieved me of a pair of leather leggings that I had brought with me from New York. They then went their way telling us that no one was to leave camp for town that day. They also let it be known that they were the same band that had been to the mine and had shot one of the engineers and left him for dead. In a couple of days a special messenger pulled up to the camp with a letter from headquarters telling us to break camp and hit the trail for town. The general manager believed we were in the danger zone and not alone from attacks on us personally were we likely to come to harm but when those bum shots get to shooting, somebody in the next province might get hit. The uprising was finally quelled without the hoped for intervention of the United States and our people after much delay and expense began operations again.

Our people were very sore of the setback to their activities and thought that the United States should send white men down here to quell the disturbance. I, however, am with the home government and believe that these small Cuban fry be left to sink or swim. I would not hazard the life of one American in an endeavor to straighten out these rascals who, if straight today, would tomorrow try to undue all that had been done for them in an endeavor to get something more of value for themselves. Really I could be arrested for what I think about Cuba and its politics.

We are now at a point in our activities where we are about to realize something concrete. At this juncture, with our railroad scheme abandoned, I am figuring to return to the States but I am being asked to remain. In spite of the progress that I may make here I want to return to the States and do my bit and so I hope to get under way before long.

Please accept my good wishes with the hope that I may have the pleasure of seeing you when I go to Boston.

There's a typical letter of the kind the secretary loves to receive.—Frank Wood, II, was at the last dinner, but had to leave early, so did not speak his piece at that time, so he was "elected" to perform this time. He said his career has been that of a gas man. He started with the Boston Consolidated Gas Company at the bottom of the ladder, eager to climb. He left in a month, however, due to a death in the family in the West. When he returned he spent fourteen months with the Lynn Gas and Electric Company, on street work and testing meters. Then he went to Philadelphia for six months' work in the construction department of the American Gas Company. Then he jumped to New York state, where for three years and a half he was an assistant superintendent for the Brooklyn Union Gas Company. After this he returned to the

Hub and joined the construction department of the Boston Consolidated. For the last two years he has been at the Everett plant of the Consolidated specializing in water-gas work.—Bill Burleigh, II, started his Institute career with the class of 1910, but finished with 1911 and has always been affiliated with the latter class. He started after leaving Tech in the designing line for a silver manufacturer in Newburyport. Then he went to railroading for a while with the New York Central in Buffalo. He worked on mechanical stokers there. He told the fellows that while on his next job he used to inspect a lot of the wire that Dennie made when with the American Steel and Wire Company in Worcester. At this time he was connected with the Underwriters' Bureau. He is now, and has been for some time, with William Whitney, Inc., in the selling end.—Otto Schurig, VI, spent the junior and senior years at Tech, following a course at Harvard. He had originally planned to enter the field of telephony and went to Philadelphia planning to learn the business when he graduated. He returned to Boston in the fall, however, intending to take a P. G. course, but instead joined forces with N. J. Neale, consulting engineer, in office and general engineering work. He soon joined the Stone & Webster Management Association, starting in Pawtucket with the Blackstone Valley Gas and Electric Company on meter work and later on switchboard work. In 1913 he accepted a position with Professor Laws in the standardizing laboratory at the Institute. He spent a very interesting year with Professor Laws and then joined the research division of the Electrical Engineering Department at its beginning. He, however, expects to join the General Electric Company in November in the consulting engineering department.—Roy MacPherson, II, said that when he left Tech he didn't want to work and couldn't afford to loaf, so he went to sea. He worked as engineer for the United Fruit Co. between Boston and Costa Rica. Then he spent about fourteen months with the American Brass Company in Waterbury, Conn., but found himself too temperamental for that job. So he went to Georgia on a cotton machinery proposition, whence he joined Willett, Sears and Company in New England as "equipment specialist." For the last two years he has been in the marine engine game with the Chinese-American Company, whose main office is in Shanghai, with a branch in the Hub. While with these people Roy suggested a line of "submarine chasers" and through a friend of his, Captain Wood, the idea was introduced in England. He said, however, that "his friend" Charlie Schwab got the contract for building the chasers.—George Cumings, VI, started out on survey work with tape surveys predominating. In December, 1911, he went with C. D. Parker in Franklin, Mass., on electric meter work and the following summer to Palmer on similar work. In 1914 he worked on the road for the Sterling Lamp Works, covering the state of Maine. Then in 1915 he went with the Fore

River Shipbuilding Corporation in the electrical end. He started on the building of the U. S. S. *Nevada*. He told in a most interesting manner the story of the trial trips of this boat. He followed this with destroyer and submarine work and in July of this year started on his present work as a civilian employee in the U. S. Navy with the inspector of electrical machinery in Quincy, Mass.—C. A. Linehan, I, graduated from Harvard in 1910 and then spent one year at Tech. He started out in architectural work but soon got into teaching, specializing in mathematics and coaching athletic teams. For several years he has been at Rindge High School in Cambridge, Mass.—Tommie Haines, II, said he has worked for two years and played for four since leaving Tech. He was back teaching under Professor Miller for two years in the Steam Lab. At the same time he did some designing work for the Raymond Engineering Company. Since the fall of 1913 he has been with the Boston Edison Company in the Maintenance of Lines Department. He rides around in an auto and everything!—O. S. Clark, II, said he had been practically all the time in the construction line, where one flits about. He was in Cuba and Jamaica for one year and ran into a revolution, escaping unscathed, however. He has been specializing in designing and practical construction work. He said he was just finishing a job in New Hampshire and the next Monday would be out looking for a new job.—Joe Gershberg, VI, has been with the same company ever since leaving Tech, namely the General Electric Company in Lynn. He started in the turbine department, running tests on turbines at first. In this connection he narrowly missed a serious accident in a test and shortly afterwards was transferred to the commercial division of the steam turbine department in the engineering line. He is particularly trying to improve turbine efficiency. He was glad to state that he designed a 750-KW. steam turbine which is now in use at Tech. He has also invented a commutator-less D. C. motor, but it remains to be seen how it will work out.—Fred Daniels, VI, came down from Worcester for the dinner and the boys were glad to see him again. During the summer of 1911 he traveled with his brother, doing a lot of hunting in the Canadian Rockies. In the fall he went with the B. F. Sturtevant Company in Hyde Park, finally specializing in forced draft work. Through his contact with stoker design he became acquainted with Sanford Riley, formerly chief engineer of the Taylor Stoker Company of Philadelphia. Mr. Riley was just forming an organization to manufacture stokers, so Fred joined as one of four men in the company in January, 1913. He has been with the Riley Company ever since in Worcester, doing everything from draughting to typewriting and financial and legal work. A large business has been worked up and a plant has just been bought in Detroit to manufacture for the western trade. There are several Riley stokers in the M. I. T. power house. To show

the diversification of their business he said the company's first job was in Worcester, Mass., and the second in Regina, Saskatchewan. —Following these interesting talks the secretary told the boys all the news he had concerning 1911 war activities. This has, of course, largely been covered in the early portion of these notes. The following '11-ers have been called in the draft and exempted: M. E. Comstock, VI, industrial exemption; A. L. Gardner, II, dependents; Charlie Hobson, X, too light; Ted Van Tassel, X, industrial exemption; Frank Wood, II, dependents. The secretary has learned of no 1911 drafted men who have been accepted. —Jim Duffy, VI, wrote that only a previous engagement kept him away from the dinner, but that probably the boys would be glad to get a rest from any Amy Lowell stuff. Jim said he apparently would be called for everybody else in the district seemed to be an alien.—Mr. and Mrs. R. T. Haslam are the proud parents of Robert Thomas, Jr., born July 31, 1917. Congratulations, Bob!—New London, Conn., was the scene of the marriage of Harry R. Tisdale, V, and Miss Grace Roath Holloway on the fourteenth of July. Welcome to the Benedicts, young man!—Two days before the dinner, or on the 9th of October, Robert E. Anderson, III, and Miss Maybel Donnelly were married at St. Mary's Church, Marietta, Ohio. Mr. and Mrs. Anderson will be at home after December 1 at the Audrey Apartments, Avondale, Cincinnati, Ohio.—Word has reached the secretary of the marriage of Capt. Reginald L. Jones, VI, and Miss Marion E. Babcock. No details accompanied the news, however.—Ken Faunce has set out on a transcontinental business trip for his insurance firm.—Bill Coburn and wife have settled in Winchester, where they will be glad to greet their friends at 5 Ridgfield road.—As October passes into the discard your secretary adds this postscript. One more 1911 man is known to have joined the service, to wit: "Georgia" Barnwell, VI, the "Pride of Pecan Plantation." He is at present training at Fortress Monroe, Va., in the O. R. C. school of the C. A. C. Good luck to you, Georgia!—Jack Devlin is stationed at the Ayer cantonment, where he is a first lieutenant in the 301st Engineers.—Another '11-er at Ayer is Capt. L. W. Perin, I, II, of the 301st Infantry.—In writing the original notes, your secretary neglected to give a résumé of some draft data compiled in connection with the dinner notices for October 11. The average man from 24 who replied is shown in a position where 63.4% of the district precedes him. The following men of the 24 were in the final 20% of their respective districts: M. E. Comstock, 3.7%; P. S. Avery, 10.2%; F. A. Wood, 13.1%; E. D. Van Tassel, Jr., 14.8%; and C. F. Holson, 18.2%. The following men on the other hand were in the last 10%, with their position along the line as indicated: A. V. Leary and D. S. Smith, each 94.3%; E. R. Hall, 94.0%; C. G. Richmond, 92.9%; L. D. Cushman, 92.8% and O. B. D., 90.1%.—Remember, boys, the "live" news, as soon as

received, will be published in the revived *Tech*, at once, but will be summarized as usual quarterly in these pages. Don't let the three cent postage deter *you* from writing any news you obtain to the secretary! Obey that impulse!—Now for the address changes to close.

Address Changes

Walter D. Allen, Port Jefferson, Long Island, N. Y.—Charles M. Barker, 17 Orne St., Worcester, Mass. (Please forward.)—Olin V. Chamberlin, 603 North Main St., Washington, Pa.—Samuel H. Cornell, 67 West 83rd St., New York City.—L. D. Cushman, 42 George St., Medford, Mass.—Joseph H. Dunlap, Hamills Point and Lake Joseph, Muskoka, Ont., Can.—William D. Foster, care H. Van Buren Magonigle, 101 Park Ave., New York City.—Herbert Fryer, care Amer. Int. Ship. Corp., 140 N. Broad St., Philadelphia, Pa.—Richard H. Gould, 9 Urban St., Mount Vernon, N. Y.—Capt. Louis Grandgent, 101st U. S. Infantry, American Expeditionary Forces.—C. T. Greenleaf, 11 Wilson Road, Stoneham, Mass.—Marcus A. Grossman, Bureau of Standards, Div. VIII, Washington, D. C.—John P. Hart, Electrical School, Navy Yard, New York City.—William F. Herrick, 105 Colbourne Crescent, Brookline, Mass.—Sergt. W. K. Hodgman, Jr., 24th Company, C. A. C., Fort Banks, Mass.—H. G. Jenks, 29 Ocean Ave., Salem, Mass.—Abraham H. E. Kaufman, 13 Lowell Terrace, Lawrence, Mass.—George C. Kenney, 3d Foreign Detachment, Aviation Section, Signal Corps, Mineola, L. I., N. Y.—Harry P. Letton, State Board of Health, Lincoln, Neb.—Lieut. R. H. Ranger, F. A., U. S. R., American Expeditionary Force, via New York.—A. Shohan, 6 Dennison St., Roxbury, Mass.—Edward Sisson, 40 Trident Ave., Winthrop, Mass.—J. B. Walcott, 734 Transportation Bldg., Chicago, Ill.—Harry W. Waterfall, 53 Fairbanks St., Brighton, Mass.—Gordon B. Wilkes, 30 Ricker Road, Newton, Mass.—Sumner C. Willis, 928 Western Ave., Pittsburgh, Pa.

1912.

J. E. WHITTLESEY, *Sec.*, 10 Regent Street, West Newton, Mass.

I met John Baker the other day and his first question was "What are you doing now?" Not that he meant to imply that one just naturally shifted as we used to, but "What real patriotic, hard work are you doing for your country?" The more you think of this point the deeper it impresses you. Now that our country has started operations in a business-like way, one by one the men drop into line.

Herbert W. Hall resigned his position as assistant manager at the Thorndike and entered the Officers' Training Corps at Plattsburg.—Pierre Drewsen is also at the Officers' Training School in

Fort Myers, Va.—Harvey S. Benson has a commission in the Ordnance Department and has been stationed at Pottstown, Pa.—Russell T. Bailey has been commissioned captain in the Engineers. He had been in for himself on consulting work and previous to that in the City Engineer's office.—Lieut. R. H. Woods, Jr., of the Ordnance Department was married, September 16, to Miss Blake of Charlotte, N. C.

From the *Boston Transcript*:

In Great Barrington, on Wednesday, Miss Mildred Pixley Harper, daughter of Mr. and Mrs. John T. Harper, became the bride of Edwin C. Holbrook of Boston, at the Harper family home. Rev. Joseph Russell Lynes, rector of St. James's Episcopal Church, performed the service. A reception followed. Mrs. Holbrook is a graduate of Mount Ida College, Newton, and of Simmons College, Boston. Mr. Holbrook is a son of Mr. and Mrs. Alston Holbrook of Brockton, and is a graduate of the Massachusetts Institute of Technology, class of 1912, since which he has been a member of the faculty. He has just been commissioned a lieutenant in the Engineer Officers' Reserve Corps.

Jonathan A. Noyes is now a full-fledged sales manager for his territory of the Sullivan Machine Co.—Erwin H. Schell is now back at the Institute where he will have charge of the new course in industrial engineering, with the rank of assistant professor.—Stalker E. Reed was married, August 14, to Miss Cobb of South Portland, Maine. Saltillo, Mexico, by way of the White Mountains is some wedding trip. Unfortunately the miners and mines have to be at distant range.—Kebbon has been in Washington on cantonment work.—Eugene Baker is now located in Philadelphia, and we understand he was married a short time ago.—Capt. Edward A. Canfield, Jr., construction quartermaster, received the highest praise yesterday from the army officers at Camp Devens, Ayer, Mass., for the success already achieved. The 1,500 buildings are 95 per cent. completed. The sewerage is finished, and the water system 90 per cent. finished. The magnitude of the undertaking has forced several revisions of plans. Captain Canfield has justified a confidence which resulted in his selection as coast artillery officer for construction work, and is probably marked for a suitable reward. His workers present a remarkable organization, which has tabulated and checked material, labor, and advancement of the work, during the entire time.—Mr. Harold H. Sharp, '12, is at present engaged in the rehabilitation of the old Stephenson-Bennett Mine at Organ, New Mexico, for the American Smelting and Refining Co.—J. E. Whittlesey, '12, had a son born August 18. The youth has been named Peter.

Address Changes

Ralph H. Riddell, 84 Brookings St., Medford Hillside, Mass.—Keneth H. Barnard, Hillsboro, Ill.—William R. Glidden, State Highway Commissioner, Richmond, Va.—E. L. Lazier, care Bureau of Construction and Repairs, Navy Department, Washington, D. C.

1913.

F. D. MURDOCK, *Sec.*, 483 Crescent Avenue, Buffalo, N. Y.
A. W. KENNEY, *Asst. Sec.*, 3511 Lowell Street, Washington, D. C.

Of the 525 men on our class roll, about 300 have sent in replies to the annual class letter. More than one-half of the men are engaged in some direct military capacity. It is fair to estimate that between enlistments and the requirements of the draft, about three-fourths of our class will be in the service of the government.

Dr. L. W. Parson was married to Ruth Pike on August 18.—Sidney Powers married Dorothy Edwards September 10.—On the first of August Walter Merrill, I, was married to Signe I. Bromston.—P. Burt was married to Gladys M. Calhoun on October 5, at Needham, Mass.—The following engagements are announced: Miles Langley, I, to Sarah Lewis Baxter of Brunswick, Me.; J. B. Shedden, IV, to Miss Zoe Mickey of Barrington, Ill.; Leo P. Hartnett to Mrs. Mary Fahey.—Ken. Hamilton, II, has a son, John Stephenson, born July 31.—Bob Weeks, VI, has a daughter whose name and birthday we do not know.

We have a few men with the American Expeditionary Force in France. E. G. DeCoen, I, is a first lieutenant with the 5th Field Artillery.—Gene Macdonald, I, is a sergeant with a regiment of New York engineers. Gene departed from the beaten track in which men of our class have made legitimate use of their engineering training to secure commissions, and enlisted as a private. He is promoted thus far to sergeant, and writes from France:

One old rounder back from leave to one of the good sized cities, where he had quite a whirl, says, "Well, you have to hand it to France. It's the best country this side of the water, but there's only one regular country, and that ain't near here." The censorship limits the tense of one's letters to past and future well removed, that is, to before I join and after I am fired. But I really am enjoying myself. The venture is panning out pretty much as advertised and my own particular course runs along as it always has, in that happy medium, where I don't amount to so much as to get into trouble but just enough so I don't have to work too hard. They have forgotten all about my application for a commission but I'm not worrying. We are camped quite comfortably now in a place ideal for a big mansion—one of those places where you come up a long winding lane and emerge on a flat open space with a patriarch of an apple tree in the centre, which the drive circles around. The huts we live in stand three abreast on one side of the yard, and there are a couple of huts for the officers straight across from them. The kitchen is over in one corner of the common, and some tables where we carry our grub to eat stand right out in the centre 'neath the shade of the big old apple tree. The sergeants have little rooms partitioned off, one in a hut, and are the rulers of their huts. There are some good fellows in mine, a University of California boy, an evangelist who has an appreciation of the serious things of life, who despairs of and regrets the actions of many of our members, and yet has a keen sense of humor even as to his own position; an old Irish blacksmith, plumber and all round man from off "Thoid Avenor"; a veteran of the Spanish War, whose actions and observations approach Mr. Dooley's, and an old rounder of a truck driver whose point of view of life is so different as to be startling and highly amusing. He arrives at the cook shack late; they pass him out a hunk of cheese the size of his fist, which he holds up to look at and solemnly remarks, "Somewhere in France—with a piece of cheese." So, tritely, he summed up his

position in life. There is very little serious or semi-serious discussion in this outfit that is why I enjoy the evangelist, who has been a traveler. Everything is gossip.

Bill Mattson, I, is in England with his regiment on the way to France.—Allan Waite, III, is a sergeant in the Signal Enlisted Reserve Corps and is awaiting orders.—D. Van Deusen, II, is a first lieutenant in the Field Artillery Section of the Officers' Reserve Corps. He spent three months at Madison Barracks, New York, which he calls "the coldest, hottest and most damnably dry town east of the Pacific."—Alex Morrison, X, was drawn in the first draft but was excused on the grounds of physical incapacity.—A. M. Mutersbaugh, I, is a first lieutenant, E. O. R. C., with an assignment in the Pioneer Regiment in the new National Army at Cape Pike, Little Rock, Ark. Previous to his enlisting he was holding the position of sanitary engineer for the City of Lake Charles, La., besides being a consulting engineer of bridges.—George H. Sickles, II, expects to be summoned in the first draft.—Max Shafran, V, is supervisor of annealing, doing government work for the Washington Steel & Ordnance Co.—E. C. Gere, I, is second lieutenant in the 2nd U. S. Cavalry.—Al Ranney, I, has sold his interest in the contracting firm of De Puy & Ranney and is now a member of the firm of Bartlett & Ranney, Inc., Consulting Engineers, of San Antonio, Texas. In August, Al was with the Officers' Training Camp at Camp Funston, Leon Springs, Texas.—R. A., Leshner, IX, is the manager of the section on cooperation with states, Council of National Defense.—Robert Schulze, Jr., V, is cashier of the William Carter Co., and has enlisted in the Quartermasters' Reserve Corps.—George H. Jones, IV, is with the 2nd St. F. A. O. R. C., whatever that may signify.—Harold Nickerson, II, is a first lieutenant in the Officers' Reserve Corps at Camp Gordon, Ga.—That brilliant and erratic statesman from far off New Zealand, Eddie Hirst, is doing something for his adopted country, taking the training of Plattsburg in the 2nd Officers' Reserve Corps.—Tom Lough, I, took exams for engineer in the Officers' Reserve Corps—that means he has passed them.—R. B. Haynes, I, was called into active service in July. He is a member of Squadron A, New York National Guard. Ray's squadron will probably be turned into a machine gun organization.—Joe Tennant, VI, was called in the first draft and found a little too light for service in the trenches. His firm of consulting engineers has been doing phenomenally well specializing in petroleum work in the vicinity of Houston Texas.—Louis Rosenberg, IV, is an instructor in architectural design in the University of Oregon, and the "rascal" is applying for a position in the camouflage unit of the engineers. Louis thinks maybe he could fool some Germans.—A. S. Martin, I, is a second lieutenant, stationed at the American University at Washington.—H. W. Dew, III, attended the Presidio Training Camp, California, and was commissioned second lieutenant in Q. M. C. He hopes to be transferred into the engineering

department.—George Bakeman, XI, is a special attaché of the American Ambassador at Petrograd. Until war was declared with Germany he had charge of the camps of German prisoners, buying the supplies for them. We wonder if he had any complaints regarding the food.—A. E. Hirst, V, was drafted and passed the physical examination; being married he was temporarily excused.—Charles Trull, VI, tried to get into the Aviation Section, R. O. S. C., but Charlie's eyes couldn't compare with those of an eagle and he lost out.—A. C. Brown, I, has been drawn in the first draft. He is at present a computer of the valuation department of the M. K. & T. R. R.—S. W. Selfridge, II, is a first lieutenant, O. R. C., stationed at the Presidio of San Francisco. Previous to enlisting he was chief clerk with the Garfield Chemical & Mfg. Corp., of Salt Lake.—F. H. Mahoney, V, is with the 101st Engineers, Company C, now in England, *en route* to France.—H. S. Von Rosenberg, IV, is in the 2nd Training Camp for Officers at Leon Springs, Texas.—Cedric Burgher, II, is serving in the Ordnance Department as captain.—R. B. Catton, VI, learned that the government was in great need of engineers to superintend the construction of aviation camps, and volunteered. He is assistant superintendent of construction at Mineola. He hopes to be commissioned first lieutenant in the Signal Corps and to see early service in France.—Sam Rogers, II, was called in the first draft.—J. E. Adler, X, will probably be taken in the first draft.—Tom Byrne, IV, is first lieutenant of Ordnance, U. S. R.—Elliott Gage, XI, is with the Burgess Airplane Co. of Marblehead, and is a candidate for commission in the Engineers' Officers' Training Camp, Belvoir, Va.—Ed Pratt, I, tried mighty hard to get into government service. He attended the camp at 1916 Plattsburg and was in the Mass. C. A. C., only to find that his right eye was a little off. Logically, he expects now to be passed by the conscription board. He is still with the Childs Co., as general efficiency man.—Arthur Clark, V, is assistant superintendent of the Goodyear Metallic Rubber Shoe Co., of St. Louis.—Bill Flanders, I, requests Wellesley and Technology to take notice that he has a daughter Elizabeth, 16 months old, and a son Robert, 3 months old. Bill's company is making supplies for the government.—M. W. Merrill, XIV, is not likely to be drafted from Chili, but he is working mighty hard for a record production of copper, which will help some. He expects to get back to this country late in the Fall.—Arthur Carpenter stood an excellent chance to become a member of the new National Army when last we heard from him.—O. C. Walton, VI, is the proprietor of a garage in Revere, Mass.—Mayo Tolman in his characteristic public spirit has taken pity on the secretary and has submitted what he calls "some stuff."

I notice that the class notes this last month were somewhat more meager than usual, so I will endeavor to write a brief account of my experience in case you want some "stuff" for a filler. It is too bad that we can't jack up some of the fellows that

the other members of the class are really interested in and have them write a tale of their woes, or joys, as the case may be. I don't suppose you know that there has been another addition to our family; a second boy, born March 20. That gives us a boy two and one-half years old, and one six months. Mrs. Tolman, whom you probably remember as Ruth Dunbar, of the class of 1911, says that she is going to have six, all boys. I object, I think that a couple of girls might come in handy. This summer we took a cottage in the White Mountains, and Ruth and the kids are still there and will probably remain until early October. I had a good vacation of six weeks with them in June and July, and spent those terribly hot days, when people were collapsing in New York and Boston from the heat, snowballing. The enclosed photograph may interest you. It was my method of carting the older youngster over the mountain trails. Mrs. Tolman has fixed a regular papoose case for the six months old kid and we can go and come as we please. I am still at my old job of chief engineer of the W. Va. State Department of Health, and have just been reappointed for another two years. The work is intensely interesting and is very exacting. I have had to add two Tech men, Ellis S. Tisdale and Andrew N. Wardle, of the class of '15, to my engineering staff. Alton A. Cook of the same class is now state chemist, and Dr. Lederer, of Technology and Harvard School for Public Health Officers, is state bacteriologist. So you see I have succeeded in getting a pretty good lot of our men down here. The public evidently has begun to have confidence in our work for they are coming with all sorts of problems. Within the past two weeks two towns that we have urged to install filters have advised that they have come to our way of thinking and contemplate letting contracts for filter construction at once. In the same period of time six towns have notified us that they will install chlorinating plants as suggested by this department. We, unfortunately, have no laws to compel the steps which we think are necessary. It has got to be done by persuasion. As a matter of fact, I believe that if you give the State Department of Health sufficient funds and put the right man in charge, every law relating to health could be wiped off the statute books and still better work be accomplished. The health movement is entirely a question of education. Speaking of education, I have just completed the designing of a public health exhibit that is going to cost us nearly \$4,000 to have constructed. The exhibit includes mechanical models to show the effect of sleeping in rooms not properly ventilated; showing how drainage from privies and barnyards can infect wells; showing how the fly spreads filth and disease, and so on. The exhibit will probably take up a hall 40x30 and should prove very instructive. In addition I purchased a number of motion picture films on health subjects. My work properly should not cover this branch of public health work, but it seems as though more and more devolves upon my department every day.

I plan within the next two years or so to give up my position as chief engineer and go into a consulting practice, but these plans may never materialize.

Mrs. Tolman and I bought a very attractive house at 1533 Quarrier Street, Charleston, West Virginia, and I hope that the '13ers will realize that they will be welcome at any time of day or night. It would do our hearts good if they will but drop in on us unannounced or otherwise.

Merrill J. Smith, VI, is second lieutenant, E. O. R. C., stationed with the 302nd Engineers, Camp Upton, Long Island, N. Y.—Daniel E. Lewis, X, was called in the first draft and exempted on dependency and occupational grounds.—V. G. Katzenstein, VI, is a first lieutenant in the Ordnance Department, U. S. R., stationed at Camp Dodge, Ia.—C. L. Burdick, III, was commissioned as lieutenant and is detailed on war research in the Research Laboratory of Physical Chemistry at the Institute.—Effie L. Macdonald, V, has left the College of Medicine, University of Illinois, to build up the laboratory and do research work at the Waterbury, Conn., Hospital, and is doing all work which is available for a woman to do

in the way of filling the breach left in the hospital by the enlistment of several doctors.—J. B. Woodward, II, was called for examination in the first draft.—A. P. Smith, VI, has a son, Allison, born April 14. The youngster will probably be the means of exempting his father from the present draft.—George Sampson, II, is branch manager of the Elmer Automobile Co., of New Britain, Conn. He has tried without success to enter several branches of the government service.—John Welch, X, is head of the laboratory division of the Winchester Repeating Arms Co., comprising powder laboratory, miscellaneous chemical laboratory, physical testing laboratory, heat treatment for all tools for cartridge, gun and tool departments.—G. H. Buchanan, V, is the director of Station B, School of Chemical Engineering Practice of the Institute.—Ward Lovell, II, is superintendent of the Bowker Chemical Co., Elizabeth, N. J.—E. H. Weil, III, is secretary and general manager of the Vitreous Enameling Co., of Cleveland.—Wiley J. Daniels, II, is secretary and treasurer of the Indianapolis Union Ry. Co.—Si Champlin, V, was called in the first draft and exempted. He writes:

I don't remember whether I told you I was married. We have an heiress, Carolyn Isabel, born March 12, 1917. We came near losing her for lack of a suitable food, but got a specialist on the job and now she is fat and healthy. Take my advice and go to the specialist first and save lots of trouble and sleepless nights, as well as give the baby a good start.

This is very important advice from such a distinguished authority as Si. We are very glad to pass it on for the consideration of the young fathers in the class.

C. N. Gotherman, VI, is with the E. I. du Pont de Nemours Co., which absorbed the Arlington Co., large manufacturers of celluloid goods.—Fred Lane, X, is teaching chemistry and working for his doctor's degree at Yale—weight and eyesight were a little too much against him for service in the trenches.—Max Waterman, II, is production manager for the Singer Mfg. Co., at Bridgeport, Conn.—Allen Brewer, II, recently passed with a mark of 87 per cent. a U. S. Civil Service exam for aeronautical designer for the navy.—He expects to be called shortly into that branch of service.—Scott Orr, I, was called for examination in the first draft.—Walter E. Brown, XI, is now a special salesman in the power specialties department of the H. W. Johns-Manville Co., Cleveland, Ohio.—W. N. Holmes, X, Dick Cross, VI, Henry Thierfelder, I, and Bob Gans, of class baseball fame, are at the Coast Artillery Reserve Officers' training camp at Fort Monroe, taking the training course.—Bob Murphy, VI, writes from Newfoundland:

I am supplying "juice" to build ships, weave woolen blankets, etc., and make leather into army boots, all for the Allies. My only brother and six cousins are at the front and I am doing all I can to pay the war taxes. Taking it all in all I'm kept so busy I haven't time even to damn the Kaiser.

Address Changes

Francis H. Achard, 33 Alton Place, Brookline, Mass.—Mortimer P. Allen, 208 Wells St., Milwaukee, Wis.—Clarence W. Brett, 39 Winthrop St., North Abington, Mass.—Barton E. Brooke, 83 Madison Ave., Newtonville, Mass.—Walter E. Brown, 152 LeLand Ave., Plainfield, N. J.—Harold G. Bruner, 193 Mystic St., Arlington, Mass.—Murray F. Burleson, 68 Northern Ave., New York City.—Aubrey E. Burnham, 714 Lexington Bldg, Baltimore, Md.—Henry A. Burr, 3102 Wellington Ave., Nashville, Tenn.—Madison W. Christie, Bureau of Yards and Docks, Navy Department, Washington, D. C.—Edward F. Coleman, East Bridgewater, Mass.—Harold S. Crocker, City Hall, Brockton, Mass.—Lieut. Emile G. deCoen, Jr., 7th U. S. Field Artillery, Fort Sam Houston, Texas.—Donald V. L. Downs, 29 State St., Dover, Del.—Frederick W. Earton, 44 Dover St., Worcester, Mass.—Robert H. Fairchild, 5841 West End Ave., Chicago, Ill.—Fred C. Hersom, American Printing Co., Fall River, Mass.—John H. Hession, 592 Huron Ave., Cambridge, Mass.—Arthur E. Hirst, 55 Madison St., Fall River, Mass.—William N. Holmes, 1st Training Co., C. A. C, Fort Monroe, Va.—Halsey B. Horner, 244 Madison Ave., New York City.—Wister W. Johnson, 33 Commercial St., West Lynn, Mass.—Ira W. Knight, 141 Ivy St., Providence, R. I.—J. Warren Lovell, 1421 Arch St., Philadelphia, Pa.—Effie L. Macdonald, Waterbury Hospital, Waterbury, Conn.—Henry D. MacDonald, American Zinc Co., Jefferson City, Tenn.—Victor Mayper, 253 West 112th St., New York, N. Y.—Alan H. Means, care G. H. Adamick, 189 Madison St., Chicago, Ill.—F. D. Murdock, 483 Crescent Ave., Buffalo, N. Y.—Robert B. Nichols, 4 High St., Warren, Mass.—Naval Constructor Edmund R. Norton, care Lake Torpedo Boat Co., Bridgeport, Conn.—Ferd. H. Pendelton, Jr., 117 Cedar St., Malden, Mass.—Frank N. Phelps, 160 Chestnut St., Cambridge, Mass.—T. Wellington Pinnock, 6 Holly St., Salem, Mass.—Harold M. Rand, 23 Conway St., Roslindale, Mass.—Ralph S. Rankin, U. S. S. Missouri, care Postmaster, New York City.—Luther Renfrew, 716 N. Fourth St., Steubenville, O.—Frederick T. Robinson, Navy Department, Bureau of Yards and Docks, Washington, D. C.—Nathaniel McL. Sage, Essex St., Weymouth Heights, Mass.—Samuel W. Selfridge, 2615 California St., San Francisco, Cal.—Capt. George H. Starr, 3d Ohio Field Artillery, Washington, D. C.—George A. Taylor, 121 South 7th St., Easton, Pa.—John Turner, 129 East 82nd St., New York City.—Allan G. Waite, care Waite, Ranlet & Co., 80 Broad St., Boston, Mass.—Max L. Waterman, 1044 Nobel Ave., Bridgeport, Conn.—Robert W. Weeks, 807 West St., Wilmington, Del.—Lindsey W. Whitehead, Pennsylvania State College, State College, Pa.—Ronald M. Wilson, Kennebunk, Me.

1914.

C. J. CALLAHAN, *Sec.*, 14 Prospect Avenue, Lawrence, Mass.
ELMER E. DAWSON, JR., *Asst. Sec.*, 28 Washington Street,
Winthrop, Mass.

The following is part of an interesting letter from James M. White, who has recently been decorated with the Croix de Guerre for his services as driver for the American Ambulance in France:

So many things have happened since my last letter that I hardly know where to begin. Also, I am pretty tired out, so please excuse this letter if it is rather incoherent. We have been working our present posts now for three weeks and often it has meant forty-eight hours steady. Not only has it been hard work but it has been most exciting. One of the boys who has been always with the section says that never has he seen such all round hard and exciting work. It is practically over now, and we will all be very glad to go *en repos*.

You have seen by the papers of around this date what a successful attack the French have made. Out of the numerous sections of the ambulance we have the honor of doing the hardest work, and it has been well appreciated, for letters have been written to the General about it. That probably will mean a citation for us.

When I write you about what we have gone through I do it, not for personal reasons, but because I want you to know that this work is no play, and far from being an occupation of the "semi-heroic rich." I have seen more of war in five minutes in this section than in months in the other places we have been. Nine of our twelve cars have been hit, but luckily only one chap has been wounded, and that not very seriously. I really think there is a divine Providence watching over us, for you would hardly believe some miraculous escapes that have taken place.

I have seen demonstrated something which I had heard but never believed; namely, that a shell can land so close that its proximity saves one, the *éclats* going over one's head. Shells play queer tricks at times. Three cars were standing in a row, one with two wounded. A shell landed near and the concussion blew whole panels out of each car and killed the two men. The remarkable part is that neither the cars nor men were actually hit by anything but dirt.

Nowadays the Germans seldom send over waves of gas. They seem to prefer to send in hundreds of gas shells. These have the same whistle as the high explosives, but do not explode with a loud noise. It is more like the opening of a gigantic ginger ale bottle. They do a lot of damage, for they often catch one unawares. They will pick out a hollow and just drench it with gas shells; some smell like garlic and others like mustard. We have found it impossible to drive at night with masks on especially those of us who wear glasses, for they immediately fog up. All of us dread these shells, much preferring to take our chance with the high explosive. A soldier was telling me of a new gas that they send in by shells. Wherever there is a perspiration on the body it forms an acid which gives a very bad burn. Then men suffer most around the necks, under the arms and on the hands.

Altogether, this has been a tremendously interesting period. The aerial activity has been intense, there being lots of fights and numerous captive balloons brought down. The Germans have a nasty habit of coming over at night, flying low and turning their *mitrailleuse* on the roads which they know are crowded with wagons carrying material.

By a lucky shot the other day the Germans started a fire in a small munitions depot quite close to us. I have seen displays of fireworks, but this has them all beaten with a four hours' display. Some of the *abris* up front are perfect marvels of safety and comfort and I shall try and give you an idea of one. One side of a solid stone hill had been used before the war as a quarry. This particular side happened to be away from the *boches*. It has been so tunnelled that one walks through cave after cave with plenty of head-room and spacious rooms. Everywhere there is plenty of light supplied by an electric generator and one finds a wonderfully complete and clean operating room. Remember this is all within a mile and a half of the front line trenches, which in modern warfare is a short distance.

The wounded get splendid treatment; but of course stretchers take the place of beds, for it is by no means a hospital. They can comfortably take care of 200 men and, mind you, all of this has been cut out of solid rock. At such a post we get the men and take them back to the field hospital, where they may again be sorted for transport to the hospitals further back.

We carried quite a few German wounded yesterday and it is very interesting to hear their ideas about things in general. Most of them seem to be in great perplexity about why we declared war. Some of them seem like mere boys and others quite old, but then that holds for all armies.

It is almost a month since I heard from America, but then I know how busy you all must be with the moving. Please tell Tom that the second package of tobacco has come and I am ever so grateful. I lost my passport but have another. I had to have new pictures taken and walked all over Paris on a hot day to find a place, hence the expression.

There are thirteen members of '14 in the Service: L. S. Baird has been commissioned first lieutenant in the Aviation Section of the Signal Corps. His present address is 288 West 3rd street, St. Paul, Minn.—G. W. Barnwell is reported as being in the C. A. C. training camp at Fort Monroe.—G. A. Beach is with the Ambulance Section of the American Expeditionary Force.—H. G. Borden has received his captaincy in the U. S. Engineers, and is stationed at the Washington Barracks.—D. O. DesGranges is with U. S. Railway Engineers, 7th Regiment, France. R. C. Doremus is interested in gun carriage production.—J. B. Duc has received a commission as first lieutenant in the Sanitary Corps.—Charles P. Fisk is a first lieutenant in the Ordnance Department, U. S. R.—First Lieut. A. S. Morrison has been assigned to the New York Ordnance Office.—J. C. Morse is reported as being designer of motors and propellers in the Aviation Section.—P. S. Platt has recently been engaged in sanitary work in France, after doing similar service in Belgium and in Russia, at Petrograd and Vladivostock.—Gordon W. White is with the 7th Regiment, U. S. Railway Engineers, France.

Mr. and Mrs. Charles Copeland announce the marriage of their daughter, Helen Mills, to Mr. James Alex. Creighton, on Saturday, September 29, 1917, Thomaston, Maine. At home after November 1, 420 Spruce street, Steelton, Pa. Creighton is still with the Pennsylvania Steel Co.—Married October 25, 1917, Carroll C. Davis to Miss Caroline Deane.—Married October 6, 1917, Leicester F. Hamilton to Miss Mary A. Nichols.

1915.

WILLIAM B. SPENCER, *Sec.*, 544 No. Grove Street, East Orange, N. J.

FRANCIS P. SCULLY, *Asst. Sec.*, 5 Exeter Park, Cambridge, Mass.

Probably it is a reflection of the stirring times all about us, which makes it so difficult to get letters or facts from our classmates concerning their whereabouts, and their present activities. Information which reaches us is principally hearsay and is interesting

only in that it shows that whatever 1915 men are doing they are giving their best efforts to Uncle Sam and are "doing their bit." We hope that in the near future we may receive some good long letters so that these notes may be a real source of communication between the men of 1915 and especially between those who are at the front and those of us still at home. If you are alive let us hear how you have kept so.

Early in the summer Oliver Norton started to France as a special representative of the government to study aeromotor production. He was working for a motor company in Detroit when he was called to take up his work for the United States.

V. E. Clarke is captain in the Aero Engineering Division of the Signal Corps.

"Boggsie" Morrison has been commissioned in the ordnance department, and assigned to temporary duty at Washington.

Gabe Hilton is with the second battalion of the R. O. T. C. at San Francisco.

J. Cohen has been appointed subinspector of construction at the Naval Operating Base, Hampton Roads, Va.

A. E. B. Hall has been commissioned first lieutenant, O. O. R. C., and is waiting assignment to duty.

We read an account of a Donald Belcher receiving the French war cross for bravery on the battlefield, while serving as an ambulance driver. We believe this is our Don Belcher, erstwhile pacifist and antagonist to all things military. Great changes do occur, and this seems to be a happy one for which we congratulate Belcher.

We gather quite a heap of information from this letter of "Bill" Smith.

Things have been coming my way lately pretty thick and fast, I've reformed and decided to let you know I'm still living while I've got the chance. You know I've been working in Boston as a concrete designer. Well, I was getting lots of experience but not much else, so when I received a letter from the Navy Department about some vacancies in the Engineer Corps of the Navy, and suggesting that I take the exams, I didn't waste much time getting my application in. That got by somehow, and I was ordered to report to Washington to take the physical and technical exams.

Since I have been in the service I have enjoyed it very much, particularly since they sent me to Baltimore. After we were first appointed they sent us to the Naval Academy at Annapolis for a month's seasoning. The group of twenty-five of us was then split up into bunches of two to four, and we were ordered to navy yards all over the country. Niemann and I were among the four sent to Norfolk Navy Yard. We were having a pleasant time down there—Niemann and I were living together—when we were both sent on detached duty of the same sort, but at different places. Niemann is stationed at Fredericksburg, Va., now, while I am sojourning here at Baltimore. My work, which is in connection with construction supplies, keeps me on the water in Baltimore harbor most of the time, which, added to the fact that I'm not kept too busy and that I'm my own boss here, makes the work pretty pleasant for me. I do not know how long they will keep me here, but it will probably be until the first of the year or so. I expect it won't be quite so pleasant on the water when the winter breezes get to blowing. There is one trouble with this job—you don't stay in one place long enough to get really acquainted before you

go somewhere else. However, I manage to find enough to do to keep me out of mischief.

The other men who got in from Tech beside me were Niemann, Strachan, '13, Bond, Shack, Peaslee; Wolfe and Jack Morse tried but fell down on the physical exam. Joe Stachan is stationed at Charlestown now, all alone. Peaslee was sent to the Pacific Coast, as was Shack. Poor Bondy drew Charleston, S. C., considered the least desirable of the bunch.

Parry Keller is a first lieutenant in the Ordnance Department, U. S. A., and is located at the Frankford Arsenal, Philadelphia, Pa.

Doug. Baker was amongst the Tech men at the first Plattsburg Officers Training Camp. We have not yet heard whether he was successful in obtaining his commission but believe that he came through as well as the rest of the Tech crowd.

K. D. Kahn writes that his new address is care of The Cleveland Metal Products Company, Ivanhoe Road, Cleveland, Ohio. His residence address is 13496 Euclid Avenue, Cleveland. Euclid Avenue must be some avenue, and K. K. must live in the last house.

Just listen now, we are going to have a Ph. D. amongst us. If you don't believe it read this letter from Lucius Bigelow:

I want you to get my new address. I missed a class dinner last year because the notice went to the wrong address, and I got it the day after the dinner. Never again.

After my year as assistant under Professor Moore, I got the opportunity to study on for a Ph. D., an opportunity which I hardly ever expected to have. Being advised that work at another institution would help my education by giving me insight into a different point of view, I went to Harvard and did a year's work in organic research there. Then I transferred to Yale, and am starting in as graduate student and assistant here, and expect to earn my degree by 1919, three years of research work all together. Some of the fellows looked kind-of-edgewise at me when I told them that I was going to take research at Harvard. But you can just bet that I didn't go there because I have lost any of my allegiance to the "Stute." I guess not. Contact with the classic shades of "Harvardianum" made me like old M. I. T. better if anything.

Best wishes to all '15ers! Drop me a line if you get time. I should be mighty glad to hear from you. . . . No, I am not married, not yet, nor soon, so far as I know. 'Tis a hard and cruel world so they say, but I don't believe it.

The war is terrible, but I am going to do my best not to be too gloomy over it, for I am trying to believe that out of all the bad some great good will come. I know it will. My brother is in Europe in the ambulance service doing his duty for his country. My eyes are so that it is my duty to continue my work here.

With best wishes,

LUCIUS A. BIGELOW,
37 Lynwood Place,
New Haven, Conn.

Norris Kimball was married to Marion Tabor in Buffalo on March 31. P. J. Munn and Greta Cady were married in Lowell, Mass., on October 24. We have received no further news concerning these romances, but sincerely extend our best wishes and those of the class to the newlyweds.

Don Hooper is at the Bath Iron Works, Bath, Maine, where they are doing much government shipbuilding.

Easty Weaver and Arthur Ball are now spending much of their time traveling about assisting at private exhibitions of the Technicolor pictures, which are featuring a new process of color photography developed by Kalmus, Comstock and Wescott.

Tom Huff is to be married to Miss Aline Lane the 17th of November at Plainfield. The best wishes of the class go with you, Tom.

Lester Morse, I, has finished the ground course in the Army Aviation School at Cornell. He evidently had to work very hard and the chances for recreation were few and far between. When last in communication with the secretary he did not know where his final training would be obtained. Aviation seems to have claimed a considerable number of Tech men. Fritz Stark, IV, and Sidney Hall, II, have completed the ground course in Naval Aviation at Technology, and Frank Scully and Don Hughes are now taking the course. The men live and eat in the new Walker Building and utilize the Tech Buildings and the old construction offices of Stone & Webster for classrooms. The discipline is fairly hard and liberty, except for the last few weeks of the course, is only granted twice a week.

Henry Shiels, I, is now an inspector of ordnance for the government and is stationed at South Boston.

H. Anderson, I, was drafted and sent to Yaphank but the public service commission put in a claim for his exemption and he is now back again on subway work.

Henry Leek, VI, is stationed at the Brooklyn Navy Yard and is engaged on wireless work.

George T. Rooney is now out "somewhere in Minnesota" with the Cooper Engineering & Contracting Co.

C. Loring Hall, I, who left for the Orient immediately after graduation is now back in Boston. He is trying to enter the army aviation corps. Harvey Daniels, I, who was engaged in the same kind of work is now reported to be in the interior of China, the sole white man in a considerable area.

Virgil Wardwell, I, well known as "Waddie," attended one of the various naval schools held under the auspices of the government at Technology. When last seen he was proudly exhibiting the picture of his "youngest."

Brute Crowell, IV, sailed for Egypt the middle of September in charge of ten graduates of the Army Aviation Ground School at the University of California.

Marvin J. Dodd, II, is with the Houtton Cocoa Co. of Newark, N. J.

1917.

WALTER L. MEDDING, *Sec.*, 206 Ferry Street, Malden, Mass.ARTHUR E. KEATING, *Asst. Sec.*, 893 Leaview Avenue,
Bridgeport, Conn.

The following men have been commissioned second lieutenant in the Coast Artillery Corps: C. K. Allen, J. W. Anderson, C. E. Atkinson, J. H. Babbitt, A. F. Benson, A. D. Dickson, J. P. Ferral, Jr., J. P. Gardner, T. E. Hannah, T. W. Hansberry, F. C. Howard, P. E. Hulburd, E. J. Keesley, G. S. Kennedy, D. D. Kittredge, F. S. Krug, Jr., R. W. Logan, J. S. Mac Dougal, F. A. Nelson, J. R. Ramsbottom, E. H. Raymond, L. E. Schoonmaker, W. H. Seymour, S. R. Stribling, W. C. Swain, M. E. Tourtellotte, J. E. Wallis, Jr., E. M. Woodward.

C. S. Makepeace and H. N. French have been commissioned ensigns in the United States navy. French has been ordered to Annapolis for intensive training.—S. L. Kuhn, I, W. L. Medding, I, F. B. Hastie, I and XI, and William Lobmeyer, I, have passed their Engineer Corps examinations and will be commissioned shortly.—T. Ryan, I, L. T. Hill, XV, R. J. McLaughlin, XV, and E. P. Brooks, XV, are reported as now on active service in France.—K. H. Day, F. B. Smith and D. Tarpley, IV, are in the Ambulance Service at the front.—F. Bernard has been commissioned second lieutenant in the Quartermaster Division.—F. S. Conaty has received a second lieutenant commission in the Reserve Corps.—J. O. Connolly has been assigned to duty in the extra-cantonment zones by the Red Cross Bureau of Sanitary Service.—J. M. DeBell qualified for provisioned second lieutenant in the army.—C. H. M. Roberts, first lieutenant, O. R. C., has been ordered to the Springfield Arsenal.—S. H. Batchelder and J. H. Marine are in the U. S. Army Aviation service in France.—S. C. Downing is second lieutenant in the Field Artillery Reserve and is now in France.—D. E. Bell, first lieutenant, 39th Infantry, is stationed at Syracuse, N. Y.—T. Z. Haviland has been commissioned as first lieutenant in the Ordnance Department.—F. S. Hubbard is stationed at Washington, D. C., acting as aviation draftsman.—J. V. Leonard is senior first lieutenant in the 303d Infantry at Camp Devens.—W. J. Littlefield, commissioned lieutenant, is attaché of the Ordnance Department at Washington.—M. L. Means, L. A. Swan, and W. C. Wood are attached to the Aviation School at Technology in the capacity of first lieutenants.—R. Collins is with the 201st Engineers, now stationed in France.—S. R. Stribling, second lieutenant, C. A. C., is stationed at Fortress Monroe, Va.—F. M. Newton is with the C. A. C.—L. Davis is a machine gun instructor at the Springfield Arsenal.—H. E. Lobdell is second lieutenant in the 10th Company 3d Battalion, Depot Brigade.—I. B. McDaniel is now assistant naval constructor, U. S. N.—Charles Miller, first lieutenant, is in command of Company B, 301st Field Signal Battery.—M. C.

Works is second lieutenant in the 9th Company, 3d Battalion, Depot Brigade.—H. C. Williamson, second lieutenant, is connected with the Adjutant General's Department, Division Headquarters.—E. E. Polley has been commissioned second lieutenant in the E. O. R. C.—H. O. Whitney is connected with the Naval Reserve.—P. B. Watson is located at the Bureau of Standards, Washington, D. C.—D. F. Holden is attached to the Gas Division under Major B. Dewey, '09.

H. P. Eddy and Miss Eleanor McGowan of Worcester were united in marriage October 20.—J. E. De Merritte, W. B. Newell, and F. D. Foss are in the Boston office of Stone & Webster.—The engagement of E. P. Reynolds to Miss Edna Marriner Sully of Brooklyn, N. Y., has been recently announced.—H. E. Strout is connected with the Stone & Webster Company in Dover, N. H.—J. A. Lunn is acting as assistant to Professor Miller.—The marriage of J. W. Anderson and Miss Miriam Hawkins was solemnized some months ago. Anderson recently won a prize of \$50 for a thesis on the "Disposal of Rain Water from Buildings."—H. R. Stewart has been united in marriage to Miss Marian L. Whitcomb.—A. Ferretti is located at Technology as assistant to Professor James.—F. C. Howard and Miss Margaret Ham of Haverhill were united in marriage some few months ago. Howard is now in the C. A. C.—H. Brayton is located at the Frankford Arsenal.—E. D. Wells is with the Wagner Mfg. Co., Cedar Falls, Ia.